

INSIDE

# MILITARY SURPLUS

TOP 10  
MILITARY  
SIDEARMS  
OF ALL TIME



WEAPONS  
OF WAR TESTED  
M-1 CARBINE,  
M-1911

OLD WAR DOG  
THE WALTHER  
**P-38**

7 CHANGES  
THAT MADE THE  
**1911**  
EVEN BETTER

## COLLECTOR'S GUIDE TO GUNS

Dream **Guns**

The Most Sought Collectibles

Combat **Helmets**

How, Why Changes Occurred

Ready for the **Hot Zone**

U.S. M1A1 Paratroop Carbine



**M1 GARAND**  
THE MOST INSPIRING  
FIREARMS STORY—EVER

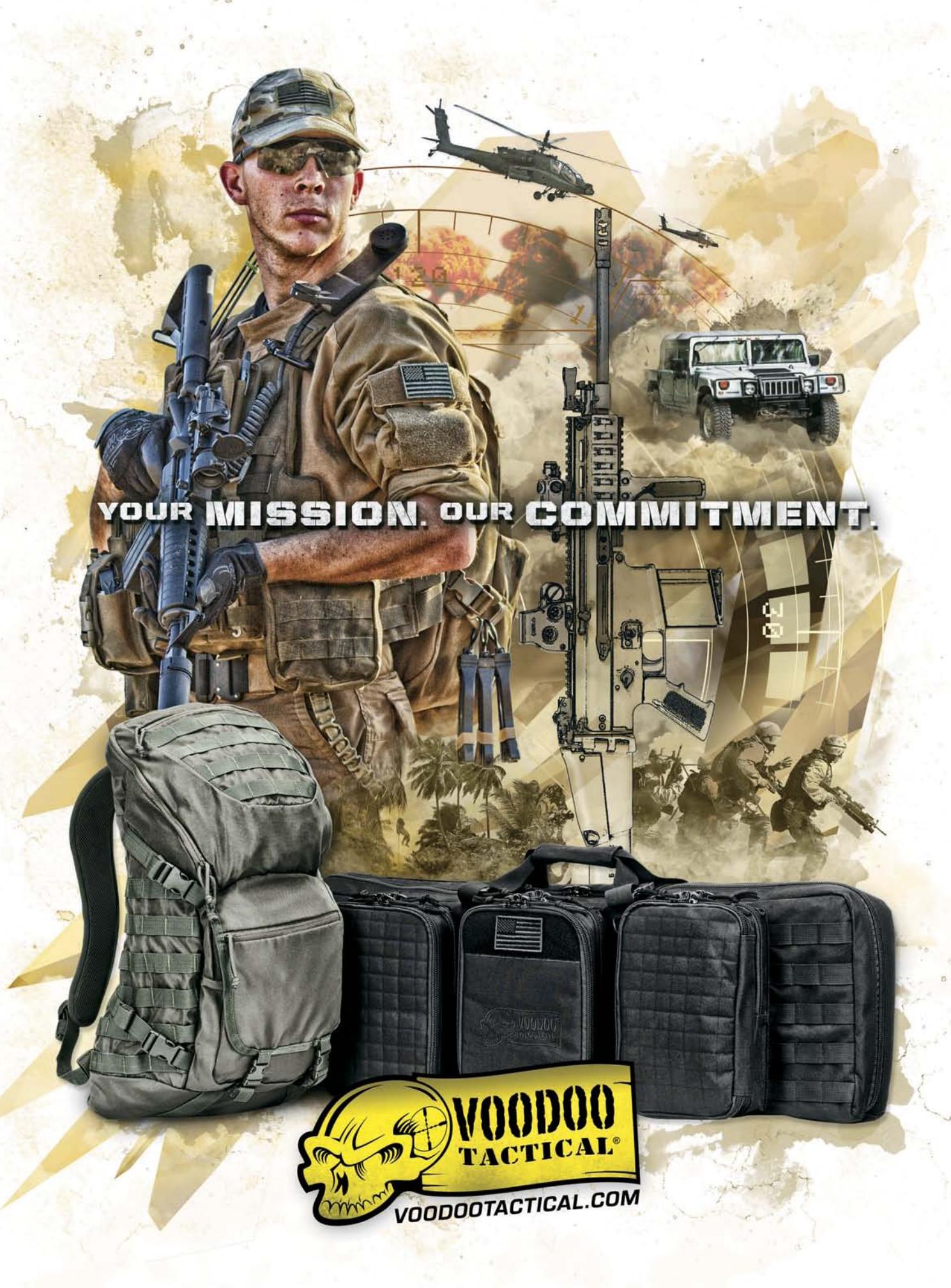


**6 MOST DOMINANT  
RIFLES OF MODERN TIMES**

FROM THE EDITORS OF WORLD OF FIREPOWER  
INSIDE MILITARY SURPLUS • WINTER 2014  
U.S. \$8.99 • DISPLAY UNTIL: 2/3/15



Engaged Media By Beckett



**YOUR MISSION. OUR COMMITMENT.**



# Table of Contents

## COVER STORY

### Perfect Hit

20

Starting in the 18th century, we have got the evolution of the sniper rifle covered. By Eric Kowal

## IMS FEATURES

### How to Buy

10

Here are the tips and tricks you'll need before mil-surp shopping.

By Dave Dolbee

### Big .45 Auto

28

Call it "Ol' Reliable," as the 1911 has been in service for more than a century.

By Leroy Thompson

### Battle Leaders

36

The top 10 military sidearms of all time may have at least one surprise.

By Tom Harmony

### Collector's Heaven

42

Major Surplus is a major source for some of the best surplus available.

By Paul Hantke

### First Love

46

You may have read many stories on the M1 Garand, but you're never read a story like this.

By Stan Skinner

### Weapons of War

52

Take a journey back in time to look at Citadel's M-1 Carbine and M-1 1911.

By Brad Fitzpatrick.

### Combat Helmets

60

The evolution of headwear in the world's military is a long and winding road.

By Jim Thompson



# Table of Contents

## IMS COLUMNS

### The Walther P38 ..... 70

This old war dog is still a shooter today.  
By Bob Campbell

### Upgrades for Your Old Army Mule ..... 76

We have three can't-miss ways for you to teach an old gun new tricks.  
By Abe Elias

### Compact Firepower ..... 80

Jumping into a hot zone required the right firearm, and the M1 Carbine filled that role admirably.  
By Leroy Thompson

### Three Generations ..... 88

This is one of the most interesting lineages of all time.  
By Paul Hantke

### Dream Guns ..... 96

Get in, hold on and read thoroughly as we talk about some of the biggest collectible guns out there.  
By Abe Elias

### Unequaled Six ..... 102

We have gone where no other man has dared to go ... we have selected the six most dominant military rifles of modern times.  
By Chuck Taylor

### Fact vs. Fiction ..... 110

Hollywood is just one of the culprits in the perpetuation of military myths.  
By Jim Thompson

### The Hi Power ..... 116

It is one of the most recognizable handguns in the world. It is the Fabrique National Hi Power.  
By Bob Campbell

### Not Quite Right ..... 122

Buying a counterfeit collectible isn't on the top of anyone's list. Here's how to avoid that problem.  
By Dave Dolbee

### The Mauser ..... 126

Get up close and personal with this German battle rifle.  
By Wilbourne Roberts

Cover photos courtesy of Stan Skinner, Jim Thompson, Chuck Taylor, Rock Island Auction Company and Bob Campbell.

### From the Editor ..... 6

### Opening Up ..... 8

### Last Look ..... 131



Pg. 36

SIG SAUER

MADE IN GERMANY

SIG SAUER INC.

EXETER - NH

# DOUBLE DOWN & SAVE BIG

**ONLY  
\$36.95**



Combine 1 Yr subscription to **American Survival Guide** with 1 Yr subscription to **Bow & Arrow Hunting** and save **67% off** the cover price

## TO SUBSCRIBE

0 9 C [www.engagedmediamags.com/combo\\_asgbah](http://www.engagedmediamags.com/combo_asgbah)  
3 BC 877 47B  
CC 7 B67B8 B 47 3 6 3 C C BA3 7 C 8 B 3C C  
- 75 70C1 76 3 00 0 5 4 F 2 367 A 3 2, # #

**YES!** sign me up for a subscription to American Survival Guide and Bow & Arrow Hunting

That is a total of 15 issues for a total savings of \$73.90 off the cover price

**Method of Payment**  **Check enclosed**  **Credit Card**  **Money Order**

Payment through credit card  Visa  MC  AMEX  Discover Name on credit card

**Subscriber name** First \_\_\_\_\_ MI \_\_\_\_\_ Last \_\_\_\_\_

**Address** \_\_\_\_\_

**City** \_\_\_\_\_ **State** \_\_\_\_\_

---

Page 10 of 10

**Enter Promo Code**

---

ENTER YOURS 3000  
**A744VSM1**

**Signature** \_\_\_\_\_ **Date** \_\_\_\_\_ / / **A744V3M** |

Enter Promo Code

**A744V3M1**

For a full listing of our titles, visit [www.engagedmediamags.com](http://www.engagedmediamags.com) today!

Allow 6 to 8 weeks for delivery of first issue. Outside US, add \$35 per year for postage. Pay in US funds only.

# Where it Starts

By Doug Jeffrey

**I**n a recent morning, marines and sailors with the 22nd Marine Expeditionary Command Element were issued vital combat gear from within the 22nd MEU supply warehouse.

The gear included items marines and sailors would need aboard ship, while participating in humanitarian relief, noncombatant evacuation operations or in combat. Most of the issued gear resists flames or simply supplements standard-issue supplies. Officials assigned to MEU supply said that a lot of the gear is standard for a combat deployment, where there exists a real risk of facing the blast of an improvised explosive device or vehicle fire.

In large sections that consisted of command element personnel, the Marines received items such as protective gloves, desert camouflage utilities and boots that were specially designed for rugged terrain.

While we may sometimes forget it, this is where it all starts.

## REMEMBER THIS

For many reasons, collectors crave military surplus. From firearms, to packs, to gas masks and more, these items can fill many roles within one's life. This magazine is devoted to exploring the wide world of these products.

Within these 132 pages, you can step back in time and immerse yourself in this world, relive past wars and forget your cares and responsibilities for a brief moment. Allow Paul Hantke, USMC retired, to delve into three generations of auto-loaders. Tag along as Eric Kowal, active military, delves into the history of the sniper rifle and let pro surplus shopper Abe Elias show you three ways to upgrade your Army mule.

While your interest in surplus can encompass all shores and many different items, don't forget where it all begins ... with the men and women of the armed forces.

As Americans, we have the strongest military in the world, and our personnel are out there now, protecting our country, our rights and our freedom. For that, we are forever grateful.

Whether you are active military, retired or simply an enthusiast, enjoy the ride, brother.

Sgt. Joshua Cox contributed to this story.



Photo by Sgt. Joshua Cox

# INSIDE MILITARY SURPLUS

## EDITORIAL

Executive Editor:

Doug Jeffrey

Editor: Dave Dolbee

Senior Creative Director:

Eric Knagg

Art Director: Chris Pasley

Managing Editor:

Hannah Roberts

## Contributors

Bob Campbell, Abe Elias, Brad Fitzpatrick, Paul Hantke, Tom Harmony, Eric Kowal, Wilbourne Roberts, Stan Skinner, Jim Thompson, Leroy Thompson, Chuck Taylor

## ADVERTISING

Gabe Frimmel - Ad Sales Director

(714) 200-1930

Gfimmel@Beckett.com

Casey Clifford - Senior

Account Executive

(714) 312-6275

Mark Pack - Senior

Account Executive

(714) 200-1939

Gennifer Merriday - Ad Traffic Coordinator

## DIRECT MARKETING GROUP

John Bartulin

(866) 866-5146 ext. 2746

Paul Caca

(866) 866-5146 ext. 4961

Ryan Lauro

(866) 866-5146 ext. 2756

## OPERATIONS

Gus Alonso: Newsstand Sales & Marketing Manager

Celia Merriday: Newsstand Analyst

Mohit Patel: Newsstand & Production Analyst

John Cabral: Creative Graphic Designer

## EDITORIAL, PRODUCTION & SALES OFFICE

22840 Savi Ranch Parkway, Suite 200 Yorba Linda, CA 92887

Ph: (800) 332-3330

Fax: (800) 249-7761

[www.facebook.com/worldoffirepower](http://www.facebook.com/worldoffirepower)

[www.facebook.com/eembybeckett](http://www.facebook.com/eembybeckett)

Inside Military Surplus © 2014 by Engaged Media By Beckett. All rights reserved.

Reproduction of any material from this issue in whole or in part is strictly prohibited.

## CUSTOMER SERVICE

Engaged Media, Inc.

4635 McEwen Road

Dallas, TX 75244

Single Copy Sales

(800) 764-6278

(239) 653-0225

Foreign Inquiries

[subscriptions@beckett.com](mailto:subscriptions@beckett.com)

[customerservice@beckett.com](mailto:customerservice@beckett.com)

## Back Issues

[www.engagedmediamags.com](http://www.engagedmediamags.com)

Books, Merchandise, Reprints

(239) 280-2380

Dealer Sales

(239) 280-2380

New Products or to Contribute a Story or Photo

[djeffrey@beckett.com](mailto:djeffrey@beckett.com)

Engaged Media By Beckett

Nick Singh: Executive Director

Vikas Malhotra: Vice President

Erin Masercola: Group Editorial &

Business Unit Director

This magazine is purchased by the buyer with the understanding that the information presented is from various sources from which there can be no warranty or responsibility by Engaged Media By Beckett as to the legality, completeness or technical accuracy.

**Engaged Media** By Beckett

# Now



## World of Firepower

World of Firepower is now available on Apple Newsstand, Google Play and Kindle.

World of Firepower provides the gun enthusiast with everything about the gun lifestyle, including the latest gear, home defense, trends, training and the hottest new guns on the market.

Download the **FREE APP** and get a 1-year subscription (6 issues) for only **\$15.99** and save **70% off** newsstands!  
You can also purchase single issues for only **\$3.99**.



For questions on downloading this app contact 800-764-6278

# 115-Year-Old Mystery

A MARINE AND NAVY TREASURE FROM THE 1800S

■ By Lance Cpl. Michelle S. Mattei | Marine Corps Base Camp Pendleton

MARINE CORPS BASE CAMP PENDLETON, Calif.

— For five years, Camp Pendleton's museum encased a unique 115-year-old entity, and no one knew its true story until a young Marine recently unmasked its origin.

A weapon initially classified as an M14 rifle was donated to the base's History and Museums office. However, museum clerk and Lance Cpl. Alexander Hitchings recognized a few distinctive characteristics that disqualified it from such a label. Hitchings, an avid rifle enthusiast, compared the various attributes of an M14 to the mis-titled rifle.

"The trigger guard and magazine well were the distinctive elements of design," Hitchings explained. "I instantly knew it wasn't either an M1 or M14 model."

Hitchings' investigation proceeded from there, ultimately resulting in the discovery that the rifle was the Winchester 1895 Lee model.

## THE DESIGNER

The M1895 Lee and Lee-Enfield rifles were both designed by the same man, James Paris Lee. One design was sold to the American company, Winchester, and the other to England's Royal Small Arms Factory.

"Once I plugged in 'Winchester' along with the patent date, the results were clear," Hitchings said. "I recognized Lee's work."

## BATTLE DAYS

The M1895 rifle was used by the Marine Corps during the Spanish American War and later in the Moro Rebellion. It also saw limited action in China during the course of the Boxer Rebellion.

"The Navy only actually purchased about 15,000 of these rifles," Hitchings explained. "Back then, they were provided to both the Navy landing forces and shipboard Marines."

But the use of this weapon was not long-lived — the service of the M1895 was replaced as early as 1899, though it was still used as a secondary weapon aboard some Navy vessels until the 1920s. While the rifle was phased out rather quickly, elements of the design carried over into the M16 used today.

The M1895 was magazine fed, which allows for faster reloading, and used a small caliber, high velocity bullet, much like what the current U.S. military uses. The design of the bullet allows the user to shoot farther and carry more bullets into combat.

"This rifle was a great catch for us," Hitchings said. "It was a very rare rifle that saw service during some of the often forgotten, but still important parts of the Marine Corps' history, and it was hiding right under our noses for the last five years."



# lost & found

GUN SHOWS ARE A GOOD PLACE TO FIND RARE, UNIQUE WEAPONS

■ By Cpl. Patrick J. Flato, USMC

The audience at the gun show didn't represent the stereotypical clientele one might expect to encounter at one of these types of events.

The first table at which I stopped was active with a group of teenagers engaged in a heated debate over which paintball gun was superior. At the neighboring table, stacked with World War II-era military surplus, I overheard a couple of World War II veterans swapping anecdotes about the wares.

Vendors range from nationwide companies selling the latest and greatest in aftermarket military and survival technology to independent collectors selling hard-to-find war memorabilia and other antiques. One could emerge from the gun show decked out in standard issue military gear from both sides of most wars of the 20th and 21st centuries.

## THOSE RARE WEAPONS

In all of this commotion, remember that the real reason to check out a gun show is for hard-to-find collector's weapons and memorabilia.

When purchasing "rare" guns and memorabilia, ensure that you do your research before shelling out for that cool trinket that caught your eye. Make sure that you know exactly what you are looking for, and its value, before making a purchase.



Photo courtesy of Jim Watson/AFP/Getty Images

INSIDE MILITARY SURPLUS

009

# Keeping the Past Alive

HISTORICAL COMPANY BRINGS CORPS MEMORABILIA BACK TO LIFE

■ By Sgt. Jose E. Guillen | Marine Corps Base Camp Pendleton

MARINE CORPS BASE CAMP PENDLETON, Calif. — Heads high, backs straight and rifles at sling arms, the Marine Corps Historical Company arrived at Camp Tulega for a five-day training cycle on the base.

Active-duty Marines, veterans and history enthusiasts make up the nonprofit organization. Donations from various museums keep the company marching.

Like a reserve unit, the company gathers for the public when called upon to boast their authentic World War II and Vietnam uniforms. They also provide static displays of original equipment used in wars.

"We go beyond the museums. We bring the museum to you," said retired Gunnery Sgt. Thomas E. Williams, the group's director. "I have points of contact nationwide and if finances permit, we'll provide a historical presentation and expose our traditions using real-life uniforms and equipment."

# Memories of World War II

REMEMBERING HEROES OF THE GREATEST GENERATION

■ By Sgt. Michael T. Knight | Marine Corps Base Camp Pendleton

SAN CLEMENTE, Calif. — The historical Casa Romantica of San Clemente, Calif. opened a special exhibit, named "Memories of World War II," with a ceremony that honored veterans.

The guest of honor at the affair was Medal of Honor recipient Walter D. Ehlers, who received the medal for actions of gallantry during the battles surrounding D-day, in June 1944.

The exhibit featured war photos from the archives of the Associated Press that included a large photo of the flag raising at the Battle of Iwo Jima. Outside of the facility were fully functional World War II-era vehicles, provided by the California Historical Group. **IMS**

OPENING

# Treasure Hunt

HOW TO BUY, COLLECT AND REPURPOSE MILITARY SURPLUS GEAR AND EQUIPMENT

■ By Dave Dolbee Photos Courtesy of Cheaper Than Dirt

**S**o, you want to start collecting military surplus gear — or maybe you have just compared modern hunting and camping equipment prices to surplus prices. Whatever the reason, your curiosity has been piqued, and you're interested in purchasing military surplus items. Maybe you have questions and concerns about quality

and condition, which would be totally understandable. Well, good news! *Inside Military Surplus* has the answers to get you started. Judging via a picture online or a catalog spread can be difficult, and finding credible information or reviews may be equally challenging. There are a limited number of resources when you attempt to research a particular piece — especially when it comes to foreign military surplus.









## START HERE

Not sure where to start? Here is a quick-start guide to use as a good first step to beginning your collection.

The first thing to do is determine the reason or reasons you are interested in military surplus to narrow your initial search. See the sidebar.

With the exception of highly collectible, extremely rare and incredibly expensive items, such as authentic German WWII Third Reich pieces, Civil War swords and similar items, surplus gear is extremely affordable, absolutely functional and very durable.

Highly collectible items are extremely difficult to find and include a hefty price tag.

If you are planning to collect items related to a certain era or conflict, do some research. In some countries the items may even be illegal to own. Anything a fallen leader owned or touched commands a high price and high demand in certain circles. I once knew of a sword believed to be owned by Yamamoto in his teenage years. While the owner was researching it with experts for authenticity, he drew the attention of the Japanese government, which immediately began laying a foundation to claim it as a national treasure if certified.

In addition to serious collectors, military surplus gear is popular with hunters, campers and preppers. Beyond BDUs, gas masks, tents and packs, the market has recently seen a resurgence of interest in military surplus guns. Leading that charge in popularity is the Mosin Nagant. A few years ago, you could pick up one of these in decent condition for less than \$100. Cheaper Than Dirt!, a great source for military surplus items of all types, recently had them for just over \$100 on a sale, so there is still hope.

Historically, military surplus rifles are easy to find, affordable and cheap to feed; plus, many people find them a joy to shoot. They have plenty of accuracy for plinking at the target range or taking game at reasonable ranges. They also make suitable first gun for a new shooter due to the price; however, there is always a "but." While the rifles are cheap and get the job done, they were designed for soldiers in battle. Old military surplus guns kick like a mule with a hangover and may turn off our new shooters to the shooting sports before they develop a love for the game.

## CIVILIAN'S HANDS

The United States military buys its equipment on contract from large manufacturers such as BAE or Federal/ATK. So how do companies such as Cheaper Than Dirt, Major Surplus and others end up with these things? Simply put, the military gives up its obsolete, excess and out-of-date gear and equipment to Defense Logistics Agency (DLA) Disposition Services that, in turn, sell or auction it off.

Once equipment, gear and supplies become demilled (which means retired, replaced with new gear, considered old or obsolete, no longer used ... such as when units go inactive, missions change or when supplies are in excess), the United States and foreign militaries auction the gear. Another potential source is private entities recovering long forgotten military equipment from storage in bunkers and warehouses.

For example, the military would contract out for a product such as a poncho. That manufacturer then

stores the product off-site. During WWII, bombs hit many of those factories. After the war, forgotten-about storage, incorrectly inventoried supplies and simply abandoned storage mean that decades later people can still recover those old military supplies.

The United States will also sell old supplies to foreign militaries. The government sells that surplus to try to recoup at least some of the large amounts of money spent on equipment. From airplane parts to paper and printers — even a donkey or a hovercraft — the government auctions almost all of its once-owned property. However, the government destroys or renders inoperable some items such as military vehicles and complete aircraft. They do that so useable military equipment will not fall into the wrong hands. Certain ammo cans and newly retired equipment also are equipment civilians cannot buy.

European surplus is unique in that it is not sold off until at least three years after decommissioning.

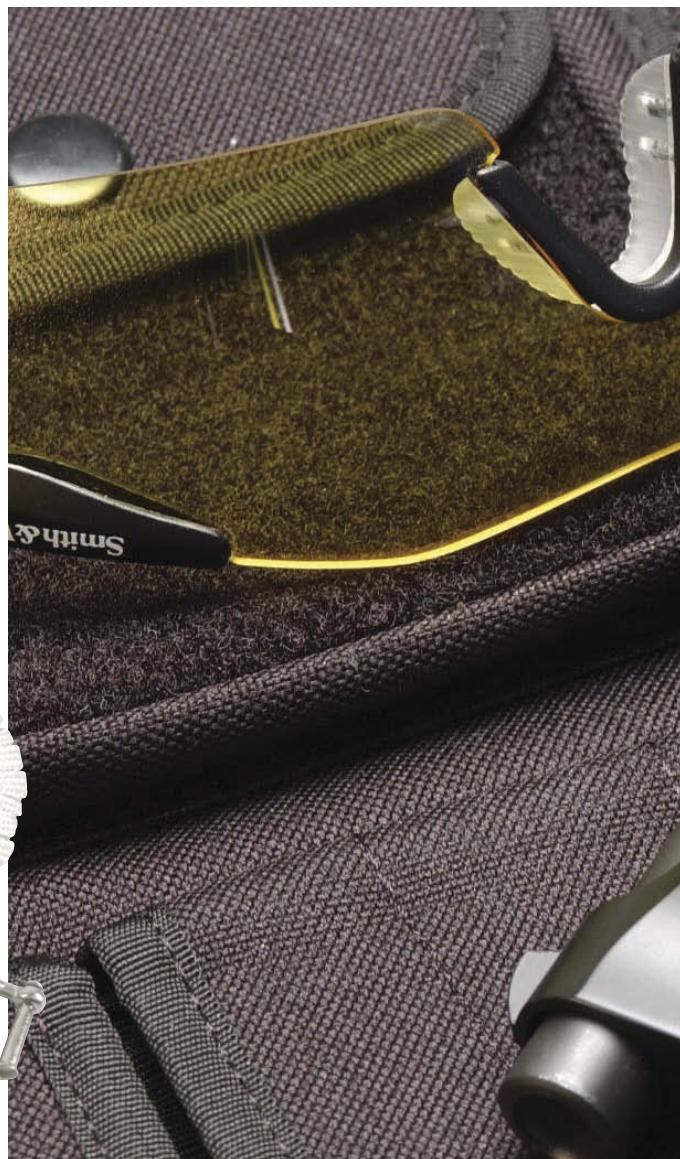
## BEST PLACES TO BUY MILITARY SURPLUS

### CHEAPER THAN DIRT!

2058 W University Dr  
McKinney, TX 75071  
(469) 952-6200  
[www.cheaperthandirt.com](http://www.cheaperthandirt.com)

### MAJOR SURPLUS

435 W Alondra Blvd  
Gardena, CA 90248  
(310) 324-8855  
[www.majorsurplus.com](http://www.majorsurplus.com)





016

INSIDE MILITARY SURPLUS

The U.S. Good 'n' Go  
All His Missed U.S.  
"Grimper" Jr.



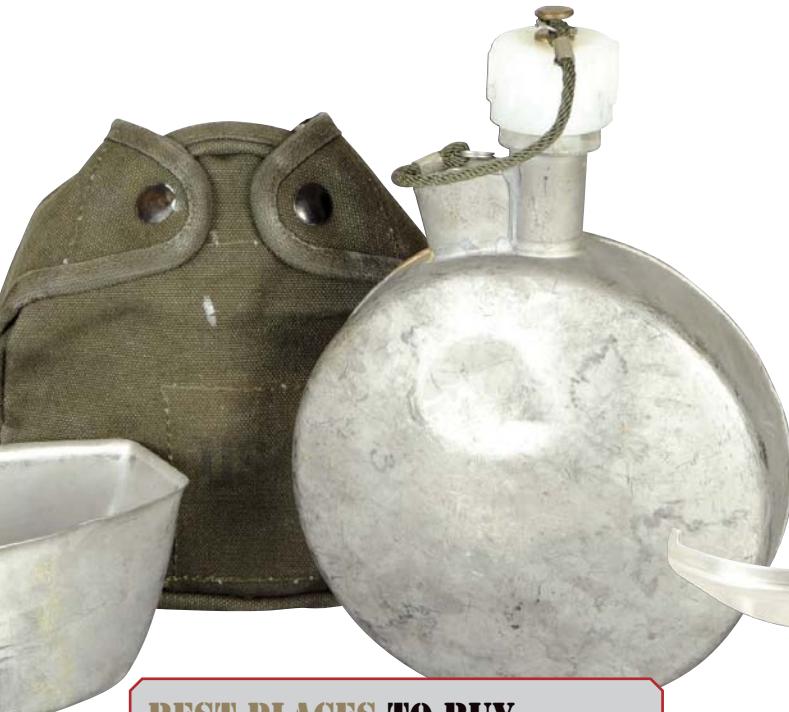
## GRADING SYSTEM

There is no official standardized grading system for military surplus gear. Everyone who sells the gear defines its condition differently. Even though a company or store says it is in good condition, the buyer might think otherwise. Cheaper Than Dirt! developed its own grading system when listing military surplus gear. Cheaper Than Dirt! considers all military surplus products used, even though some is in "new unissued" condition. It categorizes military surplus in the following four conditions:

- New, unissued
- Grade I – Used, in like new to excellent condition
- Grade II – Used, in good condition, may show minor use
- Grade III – Used, in fair condition, will show normal wear and tear from daily use

Cheaper Than Dirt!'s resident surplus experts and buyers pick out its surplus goods for many reasons. They choose items when good price and good quality align, and also when they find collectible items high in demand.

The team also considers curious, unique or interesting items that come up for sale not readily available or easily obtained — such as a body bag or a surgical suction pump. Findings include clothing, sleeping bags, tents, bags and other material goods that serve as an affordable alternative to modern clothing, camping equipment and bags — especially when cotton prices are high. Many commercial products, such as backpacks and cold weather-rated sleeping bags, are much more expensive or of much lesser quality than typical surplus gear.



**"There is no official standardized grading system for military surplus gear. Everyone who sells the gear defines its condition differently."**

## BEST PLACES TO BUY COLLECTIBLES

### ROCK ISLAND AUCTION CO.

7819 42nd Street West  
Rock Island, IL 61201  
800-238-8022  
[www.rockislandauction.com](http://www.rockislandauction.com)

### JAMES D. JULIA, INC.

203 Skowhegan Rd.  
Fairfield, ME 04937  
800-565-9298  
[www.jamesdjulia.com](http://www.jamesdjulia.com)



**“Old military surplus guns kick like a mule with a hangover and may turn off our new shooters to the shooting sports before they develop a love for the game.”**





## ID, TRACK

Another item of interest to new collectors is the National Stock Number or NSN. The NSN is the number assigned to items requested by the government and recognized by NATO as a way to identify, track, standardize and organize products. The NSN system began in WWII to standardize and classify items the same way throughout every branch of the military. This 13-digit code always appears in the same format: four numbers followed by a dash, two numbers followed by a dash, two more numbers followed by a dash and then four final numbers. An example number would look like this: 1234-56-78-9101.

Called the Federal Supply Class, the first four numbers define the type of item. The next two numbers designate the country of origin — not the manufacturing

country, but the country requesting the item. Finally, the last six digits are randomly assigned. The designations for the United States are 00 and 01. For example, when you read the magnesium fire starter's NSN, it is 4240-01-160-5618, and the U.S.G.I Kevlar PASGT helmet's number is 8470-01-300-3819. You can see that the second number in both sets is 01, meaning the United States requested the product. The NSN often appears in the extended descriptions such as on a case of weapons oil or a USMC pilot survival kit. If you are a collector, you may find this information helpful in organizing your own stockpile of supplies.

## PERSONAL ADVENTURE

Collecting military surplus is akin to a treasure hunt and your personal adventure is just around the corner. **IMS**



# 020

# The Evolution of the Sniper Rifle

A STRATEGIC GUN'S JOURNEY FROM THE 19TH CENTURY UNTIL NOW

■ By Eric Kowal

**B**oth military and law enforcement officers often find themselves in need of a weapon capable of taking out an adversary at a great distance — while simultaneously needing something that won't give up their concealment or be easily detected. Sniper rifles, as they are commonly known, have evolved tremendously over the years. Today's sniper rifles provide the upper hand to the warfighter hiding in defilade who is aiming to take out the enemy in the rugged mountain terrain, as well as the SWAT team sharpshooter primed and ready to take down the bad guy in a hostage situation.

## REACH OUT AND TOUCH SOMEONE

A sniper rifle is a precision weapon used to ensure more accurate placement of bullets at longer ranges than traditional small arms. It is often assumed that any scoped rifle is a sniper, and while certain long guns are more suited for this use than others, it is the use of a weapon as a sniper that classifies the rifle as such.

A typical sniper rifle is built for optimal levels of accuracy, fitted with a telescopic sight and chambered for a military centerfire cartridge. The term is often used in the media to describe any type of accurized firearm fitted with a telescopic sight that is employed against human targets, although "sniping rifle" or "sniper's rifle" is the technically correct term for such a gun.

## HISTORY

The military role of a sniper (a term derived from the Snipe — a bird that was difficult to hunt and shoot) dates back to the turn of the 18th century, but the true sniper rifle is a much more recent development.

Advances in technology, specifically telescopic sights and more accurate manufacturing, allowed armies to equip specially-trained soldiers with rifles that enabled them to deliver precise shots over greater distances than regular infantry weapons. The rifle itself could be based on a standard rifle (at first a bolt-action rifle); however, when fitted with a telescopic sight, it became a sniper rifle.

## FIRST SNIPER RIFLES

For the sake of brevity, we cannot go through every single sniper rifle, but we can cover a few that have made an impact and had a lasting effect on what our professionals are using today.

## HARPERS FERRY 1803 FLINTLOCK

The Harpers Ferry 1803 U.S. Flintlock rifle showed “Kentucky-style” influences specifically to emulate the accurate civilian rifles that preceded it. While slow to load, the “rifle” offered far superior range and accuracy to the muskets before it. Originally made from 1803 to 1807, production began again in 1814 for the war

effort (continuing up until 1820). As the first true military production rifle, the Flintlock’s place in history is relevant to the tactics of the day. Many military officers still felt that the best way to fight a war was standing in formation and firing in volley with smoothbore muskets capable of point-target accuracy to approximately 125 meters. The rifle effectively doubled that distance to 300 meters or more. This .54-caliber weapon was 48 inches in length and weighed 9 pounds. Similar rifles revolutionized infantry tactics by making accuracy, not volume of fire, a soldier’s primary concern.

## WHITWORTH RIFLE

The Whitworth rifle was arguably the first long-range sniper rifle in the world. Designed by Sir Joseph Whitworth, a prominent British engineer, it used twisted hexagonal barrels instead of traditional round-rifled barrels, which meant that the projectile did not have to bite into grooves as was done with conventional rifling. His rifle was far more accurate than the Pattern 1853 Enfield of the time, which had shown some weaknesses during the recent Crimean War. At trials in 1857, which tested the accuracy and range of both weapons, Whitworth’s design outperformed the Enfield at a rate of about three to one. The Whitworth rifle was able to hit the target at a range of 2,000 yards, whereas the Enfield could only manage as far as 1,400 yards.

Continued Next Page.



Snipers with Weapons Company, Battalion Landing Team, 2nd Battalion, 5th Marine Regiment sight-in their M-40A3 sniper rifles.





## SHARP 1859 BERDAN

The Sharp 1859 Berdan Contract Rifle was the first of the slightly lighter and shorter weapons with increased accuracy. The Berdan came in at 47½ inches in length and weighed 8½ pounds, but it had a range of more than 600 yards. Colonel Hiram Berdan had a novel concept at the outset of the Civil War. His intent was to enlist a few hundred of the best marksmen available and arm them with the most advanced rifles of the time. These men were to become the 1st and 2nd Regiments of United States Sharpshooters (USSS), the country's military precursor to modern snipers and Special Forces.

The initial order was placed January 27, 1862, for 1,000 rifles, but this was later increased to 2,000 rifles and 200,000 cartridges. Then, before the company had a chance to begin manufacturing, Col. Berdan decided to add double set triggers (of the hair trigger variety) and a dull blue finish to the barrel. The rifles produced saw action in numerous skirmishes and battles including Gettysburg.

While most rifles of the day had effective ranges of 125 to 400 yards, these Sharps rifles were said to have accuracy to 900 yards — as evidenced by the extra notch cut into the top of the rear sight.

## TURN OF THE CENTURY — SPRINGFIELD 1903

The M1903 Springfield bolt-action service rifle was the standard infantry rifle of the American Army throughout its participation in World War I. It continued in service into World War II, then saw limited use in the Korean and Vietnam conflicts. The design had its origins in the tried-and-proven German Mauser action that many other bolt-action rifle designs of the time had adopted (or outright copied). The result was a capable long gun with accuracy at range and a wholly reliable internal mechanism that made it a success for much of its career. After it eventually fell out of wide-scale use as a standard infantry rifle, the M1903 found a second life as a dedicated sniper rifle and in second-line support roles for guard and defense duty.



The Springfield M1903 weighed 11.6 pounds and was the first .30-06-caliber weapon of its kind, extending its reach to more than 700 yards. It would eventually be replaced by the M1 Garand.

## M1 GARAND

The M1 Garand was officially adopted in 1936 as the first semiautomatic main battle rifle in the hands of infantrymen. As with past issued guns, improvements were quickly made in accuracy and optics. The M1C Garand is an earlier sniper rifle in which the scope was mounted directly onto the receiver. Later, a mounting bracket was devised, resulting in the M1D.

Equipped with a 2.2X M84 telescope, an improvement over the earlier M82, it used synthetic rubber gaskets to protect against water hazards and shock damage. The M84 was produced in limited numbers during WWII, since it was authorized in 1945, but it was extensively produced during the Korean War. A few examples were even seen in combat in Vietnam. Other features on this rifle include the T4 cheek pad and the integral T-37 flash-hider, which replaced the removable cone-shaped M2 flash-hider in 1958. Despite the adoption of the M14, Garands continued to be used as sniper rifles through the mid-1960s. Today, the M1 Garand is still one of the most sought-after weapons for any shooter's arsenal.

## REMINGTON M40

The Remington M40 is a bolt-action sniper rifle used by the United States Marine Corps. It has had four variants: the M40, M40A1, M40A3 and M40A5. The M40 was introduced in 1966. The changeover to the A1 model was completed in the 1970s, the A3 in the 2000s and the A5 in 2009.

## M24

The M24 Sniper Weapon System consists of a Remington 700 with a long action, an H&S precision stock, an aluminum bedding block and a Leupold Ultra M3A or Leupold Mark 4. First fielded in 1988, it was widely distributed throughout the Army by 1992. The long action was intended for a .300 Winchester Magnum cartridge, but that was later changed to the familiar 7.62x51mm NATO. The long Winchester action was retained to allow the rifle to be easily upgraded to .300 Winchester Magnum (M24A2) for longer ranges. Accuracy with the M24 is unquestioned to 900 yards and effective to 1,200 yards — nearly the limit of the 7.62mm NATO round. With the .300 Winchester Magnum, targets can be engaged well beyond that mark. In 2010, the U.S. Army indicated a desire to retire and upgrade the M24, though it remained popular with the units carrying it. The M24 would later be replaced by the M2010 Enhanced Sniper Rifle.

Continued Next Page.



**A Marine prepares to fire his M40 sniper rifle during the Known Distance Course portion of the Scout Sniper Basic Course. Students in the course fire at targets ranging from 300 to 1,000 yards, developing the skills needed to become Marine Scout Snipers.**



024

### **M107 SEMI-AUTOMATIC LONG RANGE SNIPER RIFLE (LRSR)**

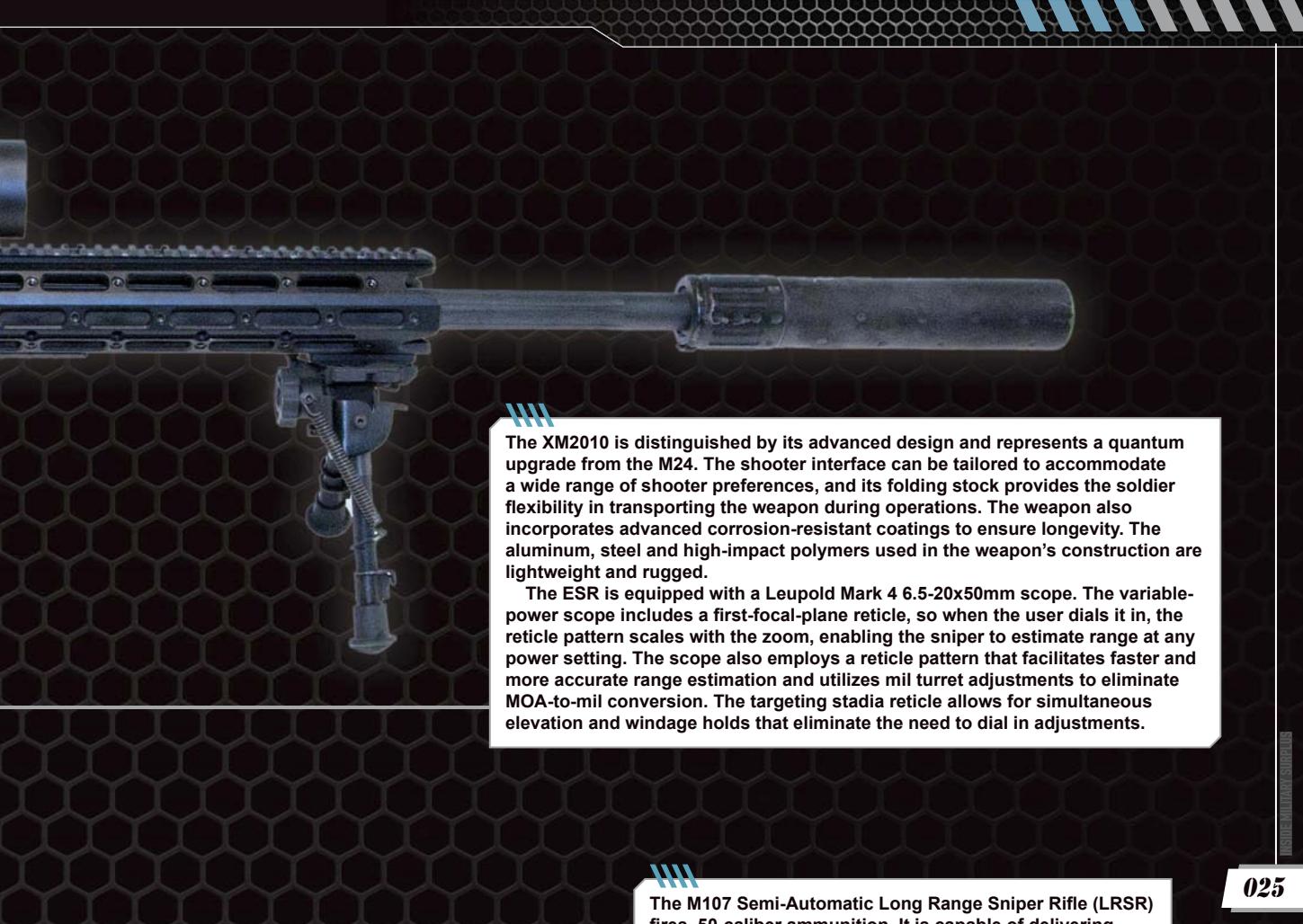
The M107 LRSR fires .50-caliber ammunition and is capable of delivering precise, rapid fire on targets out to 2,000 meters. This greatly exceeds the terminal effect capability of the M2010, M110 or M24 sniper rifles. It is especially valuable during military operations in urban terrain, where greater firepower and standoff ranges provide countersniper capability while enhancing sniper survivability.

### **M110 SEMI-AUTOMATIC SNIPER SYSTEM (SASS)**

The M110 SASS is the U.S. Army's medium-caliber sniper rifle that supplements the sniper's role to support combat operations with greater firepower and versatility. The 7.62mm SASS brings semiautomatic capability to sniper teams and is particularly effective in urban areas, where there are multiple targets and frequent close-combat situations. The M110 comes with a suppressor and incorporates a 3.5x10X scope with an illuminated mil reticle. It also comes with a M151 Enhanced Spotting Scope. The SASS is about 40½ inches in length when the buttstock is fully compressed and weighs 17.3 pounds when the suppressor is attached.



Continued Next Page



**XM2010**

The XM2010 is distinguished by its advanced design and represents a quantum upgrade from the M24. The shooter interface can be tailored to accommodate a wide range of shooter preferences, and its folding stock provides the soldier flexibility in transporting the weapon during operations. The weapon also incorporates advanced corrosion-resistant coatings to ensure longevity. The aluminum, steel and high-impact polymers used in the weapon's construction are lightweight and rugged.

The ESR is equipped with a Leupold Mark 4 6.5-20x50mm scope. The variable-power scope includes a first-focal-plane reticle, so when the user dials it in, the reticle pattern scales with the zoom, enabling the sniper to estimate range at any power setting. The scope also employs a reticle pattern that facilitates faster and more accurate range estimation and utilizes mil turret adjustments to eliminate MOA-to-mil conversion. The targeting stadia reticle allows for simultaneous elevation and windage holds that eliminate the need to dial in adjustments.



**M107**

The M107 Semi-Automatic Long Range Sniper Rifle (LRSR) fires .50-caliber ammunition. It is capable of delivering precise, rapid fire on targets out to 2,000 meters. This greatly exceeds the terminal effect capability of the M2010, M110 and M24 sniper rifles. It is especially valuable during military operations in urban terrain, where greater firepower and standoff ranges provide countersniper capability while enhancing sniper survivability. The rifle is a commercial off-the-shelf weapon. It incorporates a dual-chamber detachable muzzlebrake, dual barrel springs and a long-mainspring design to reduce weapon recoil. The M107 leverages a variable-power day optic sight and a 10-round detachable box magazine. It weighs 35 pounds (combat ready). The LRSR includes folding front and rear sights, a fluted match-grade barrel, a detachable carrying handle, a rubber recoil pad, rear grips and a Picatinny rail. The Mk211-Mod0 (A606), Caliber .50, Multi-purpose Cartridge is the preferred tactical ammunition against anti-material targets. It is employed by all U.S. military services as well as 60 additional armies around the world.





**THE HARPERS FERRY 1803 U.S. FLINTLOCK**  
The Harpers Ferry 1803 U.S. Flintlock was the first true military production rifle and doubled the effective distance of the rifles of the day to 300 meters or more. It earned its place by radically changing military tactics.

## M2010 ENHANCED SNIPER RIFLE

Formerly known as the XM2010 Enhanced Sniper Rifle and M24 Reconfigured Sniper Weapon System, the M2010 is a sniper rifle developed by the Program Executive Office (PEO) for the United States Army. It is derived from the M24 Sniper Weapon System, and it replaced the existing M24s.

The M2010 system differs from the prior M24 Sniper Weapon System in that the M2010 fires .300 Winchester Magnum ammunition to provide approximately 50 percent additional effective range relative to the M24's 7.62x51mm NATO. This chambering to dimensionally larger cartridges is possible because the M24 Sniper Weapon System was designed to use the long-action version of the Remington 700 receiver. The additional effective range helps snipers involved in engagements in mountainous and desert terrain. The most common penalties for using bigger, more powerful magnum rifle ammunition compared with smaller, nonmagnum standard rifle cartridges are increases in recoil, jump, flash, weight and general barrel wear.

## KNIGHTS MK11 MOD10

This Navy sniper rifle is an enhanced version of the commercial model SR-25, co-developed by Eugene Stoner. Its features include the replacement of the fiberglass handguard with an aluminum rail that allows for the rapid addition or removal of accessories such as night vision, a rangefinder or a flashlight.

The Mk11 Mod10 is the first sniper system to include suppressor capability with every factory rifle. The ANPVS-26 night vision quickly attaches to the rail, allowing ambient light to pass through directly to the day sight.

As the wars in Iraq and Afghanistan progressed, it became increasingly apparent that semiautomatic accuracy and reliability were needed in a target-rich environment. These environmental factors have changed the role of modern snipers. The Mk11 Mod10 has been adopted by U.S. Navy SEALs and SOCOM, and it is the foundation for the U.S. Army's current model M110 SASS, which utilizes many of the same features. **IMS**



# The 1911 Big .45 Auto

THE JOURNEY OF THE U.S. 1911 AND 1911A1 SERVICE PISTOLS

■ By Leroy Thompson

**A**fter more than a century of service, the big .45 auto is still going strong. First adopted — as one might guess — in 1911, the 1911 Service Pistol is still serving with U.S. troops today. In fact, the U.S. Marine Corps recently contracted with Colt to purchase new 1911-type guns. Let's take a look at its eventful journey.

## FIRST FAMOUS .45

The U.S. Army had used another famous .45-caliber handgun, the Colt Single Action Army, as its service weapon from 1873 until near the end of the 19th century. However, in the 1890s, the armed

forces adopted revolvers that were chambered for the .38 Colt cartridge. As long as these revolvers functioned as status symbols for officers rather than as killing implements, they seemed to suffice.

During the Philippine Insurrection of 1899–1902, the .38 Colts proved inadequate to stop fanatical Moro tribesmen, who often absorbed a cylinderful of 150-grain bullets and still proceeded to hack apart U.S. troops. Thus, as early as 1900, U.S. Army Ordnance officers began testing various automatic pistols for future adoption.

Tests of ammunition stopping power had also determined that a bullet of not less than .45 caliber was most desirable for a service pistol. The poor performance of

the .38-caliber revolvers in the Philippines was the impetus to search for a new service handgun. Various automatic pistols were tested, including .38 Colts and .30 Luger, but they were ultimately deemed unacceptable.

Therefore, the Ordnance Board put out bid specs for a .45-caliber automatic pistol. The cartridge for the pistol had already been designed and would eventually be designated the UMS M1909 round, which fired a .45-caliber, 230-grain bullet at 850 FPS.

On January 31, 1906, the Chief of Ordnance sent a letter to various firearms manufacturers soliciting revolvers or automatic pistols for use primarily by U.S. Army cavalry and light artillerymen. All guns had

to chamber either the .45 Service Revolver cartridge (.45 Colt) or the .45 automatic cartridge. Although more than 20 suppliers were contacted, only eight of them submitted pistols for the trials.

#### CANDIDATES AND TRIALS

Three automatic pistols did well enough that they were deemed worthy of additional testing: a DWM Luger, a Savage and a Colt. DWM decided that it was not cost-effective to continue in the trials, so it dropped out. As a result, the U.S. Trials .45 Lugers are so rare that one sold for \$1 million.

Subsequently, Colt and Savage were given orders for 200 pistols for additional testing. The Ordnance Board sent example guns to various infantry, cavalry and artillery units for evaluation. There were multiple problems with both the Colt and the Savage during field trials, so both pistols were tweaked and submitted for new trials in 1910. Neither pistol was considered ready for military adoption, so engineers at the two manufacturers continued work to prepare pistols for a new test on March 15, 1911.

#### THE COLT WINS

During this test, the Colt dramatically outperformed the

Savage and was adopted as the Model 1911 pistol. The contract called for the U.S. government to pay Colt \$14.25 for each pistol with one magazine; additional magazines would cost 50 cents each. Colt also agreed that the Ordnance Department could manufacture the 1911 pistol if a \$2 royalty was paid for each pistol.

On April 21, 1911, Colt received the first U.S. government order for 31,344 pistols, as well as two spare magazines per pistol and additional

**“Tests of ammunition stopping power had determined that a bullet of not less than .45 caliber was the most desirable for a service pistol.”**

spare parts. Deliveries to the Army began in January 1912. By the end of that year, the Army had received 9,950 pistols, the Navy 7,000 pistols and the Marine Corps 300 pistols.

On December 27, 1912, Springfield Armory received an order for 11,285 pistols to be

produced under royalty. Springfield Armory managed to produce pistols for \$13.26, including the \$2 royalty, for a savings of just under \$1 each.

By the beginning of 1917, just over 68,530 of the 1911 pistols had been delivered to the U.S. Armed Forces. Contracts for an additional 141,970 had been given to Colt and to Springfield Armory. However, during 1917, Springfield Armory stopped producing 1911 pistols to concentrate on producing the U.S. M1903 Service Rifle, which left Colt as the sole supplier.

#### WORLD WAR I

The U.S. had entered World War I during April 1917, necessitating a vast increase in small-arms production. In June 1917, Colt received a contract for an additional 500,000 of the 1911 pistols. However, a January 1918 Ordnance Department study indicated the need for 2.5 million pistols by the end of 1918 due to the close-quarters combat in the trenches. Orders for Colt and S&W 1917 revolvers that could fire the .45 ACP service cartridges with half-moon clips were quickly placed to cover some of the shortfall.

The Board sought other manufacturers for the 1911 pistol

Continued Next Page.

U.S. Marine artillerymen training in 1913. Note the M1911 pistols in their holsters.



A World War II U.S. paratrooper carries his 1911/1911A1 pistol so that he will have a weapon if his rifle or SMG happens to get lost during a jump.





A disassembled Remington UMC 1911 pistol. One problem with the 1911 has always been its somewhat-complicated disassembly, which includes many parts that can get lost.

as well. In December 1917, Remington Arms was given an order for 150,000 of the 1911s, which was upped to 500,000 in March 1918. However, the war ended four months later, and Remington ended up producing only 21,677 of the pistols.

The 1911 had performed very well in the trenches, and troops were quite satisfied with its reliability and stopping power. In fact, troops not authorized to carry 1911s did everything they could to acquire them. Still, the Ordnance Department requested changes in future production based on reports from the field.

Continued Next Page

# The 1911 Big .45 Auto



## THROUGH THE YEARS 1911 TIMELINE

### 1899 – 1902

The .38 Colts cannot stop Moro tribesmen.

### 1906

The Chief of Ordnance sends a letter to various firearms manufacturers soliciting revolvers for the Army.

### 1911

Colt dramatically outperforms its competitor and is adopted as the Model 1911 pistol.

The U.S. Army begins employing the Colt Single Action Army as its service weapon.

**1873**

U.S. Army Ordnance officers begin testing other automatic pistols.

**1900**

After problems in earlier tests, both the Colt and the Savage are submitted for new trials.

**1910**

After the U.S. enters World War I, Colt receives a contract for 500,000 more 1911s.

**1917**



Photo courtesy of Leroy Thompson

Requested changes included a shorter trigger and a frame cutout behind the trigger. The flat mainspring housing was replaced with an arched mainspring housing, the grip-safety spur was lengthened, the front sight was widened, the hammer spur was shortened, and the double diamonds on the grips were eliminated to make

checkering easier and less costly. Looking at it from a shooting point of view, the most useful additions were the curved recoil-spring housing that kept the hand from riding up during recoil and the longer grip-safety spur that helped eliminate hammer bite. These and a few other minor design changes were made, resulting in the new-production

pistols being designated the 1911A1. The first pistols that incorporated the changes fell in the 700,000–710,000 serial-number range in 1924.

At the end of WWI, the U.S. armed forces were downsized, leaving a sufficient stock of 1911 pistols for their needs. Some of the guns had gone to armories for refurbishment after hard use in France.

Continued Next Page.

### 1917

A government study indicates the need for 2.5 million pistols.

### 1941

For WWII, Colt begins producing 5,000 1911A1 pistols per month.

### 2014

Colt produces the M45A1 CQBP for the Marines.

The first-year changes in the 1911 are incorporated.

### 1924

The Beretta M9 replaces the 1911.

### 1985

World War II troops training with the 1911A1 (and possibly some 1911s).



The Colt Service Model Ace was designed to give the armed forces a .22-caliber training pistol for the 1911A1 pistol.

However, in September 1940, the U.S. instituted its first-ever peacetime draft in preparation for the looming possibility of World War II. More troops would necessitate more weapons, including pistols.

By December 1941, Colt was producing 5,000 1911A1 pistols per month for the armed forces. Various manufacturers were considered for additional 1911A1 production. Singer — a well-known sewing machine company — produced 500 of the 1911A1s for the U.S. Air Force. Although Singer was offered a contract for 15,000 more, it chose to do other war work. As a result, Singer 1911A1s are highly valued by collectors.

Besides Colt, three other companies produced a substantial number of 1911A1 pistols during World War II. The largest producer was Remington Rand, a typewriter company, which delivered 877,751 pistols. In addition, the Ithaca Gun Company produced 335,466, and Union Switch & Signal produced 55,000.

To speed up production, World War II 1911A1 pistols had Parkerized finishes and plastic grips, as well as a few minor changes to the sights, mainspring housing, hammer and trigger. Remaining stocks of 1911 pistols were also issued. Enough 1911 and 1911A1 pistols remained after World War II to supply troops in Korea and Vietnam, and they were refurbished as needed.

### NEW KID

In 1985, the Beretta M9 officially replaced the 1911/1911A1. However, like a persistent zombie, the 1911 continued to rise from the dead among U.S. troops — Marines kept using 1911 or 1911A1 pistols whenever they could. For MEU(SOC) (Marine Expeditionary Unit [Special Operations Capable]) personnel, Marine armorers rebuilt pistols in the inventory as accurate, reliable weapons for the operators.

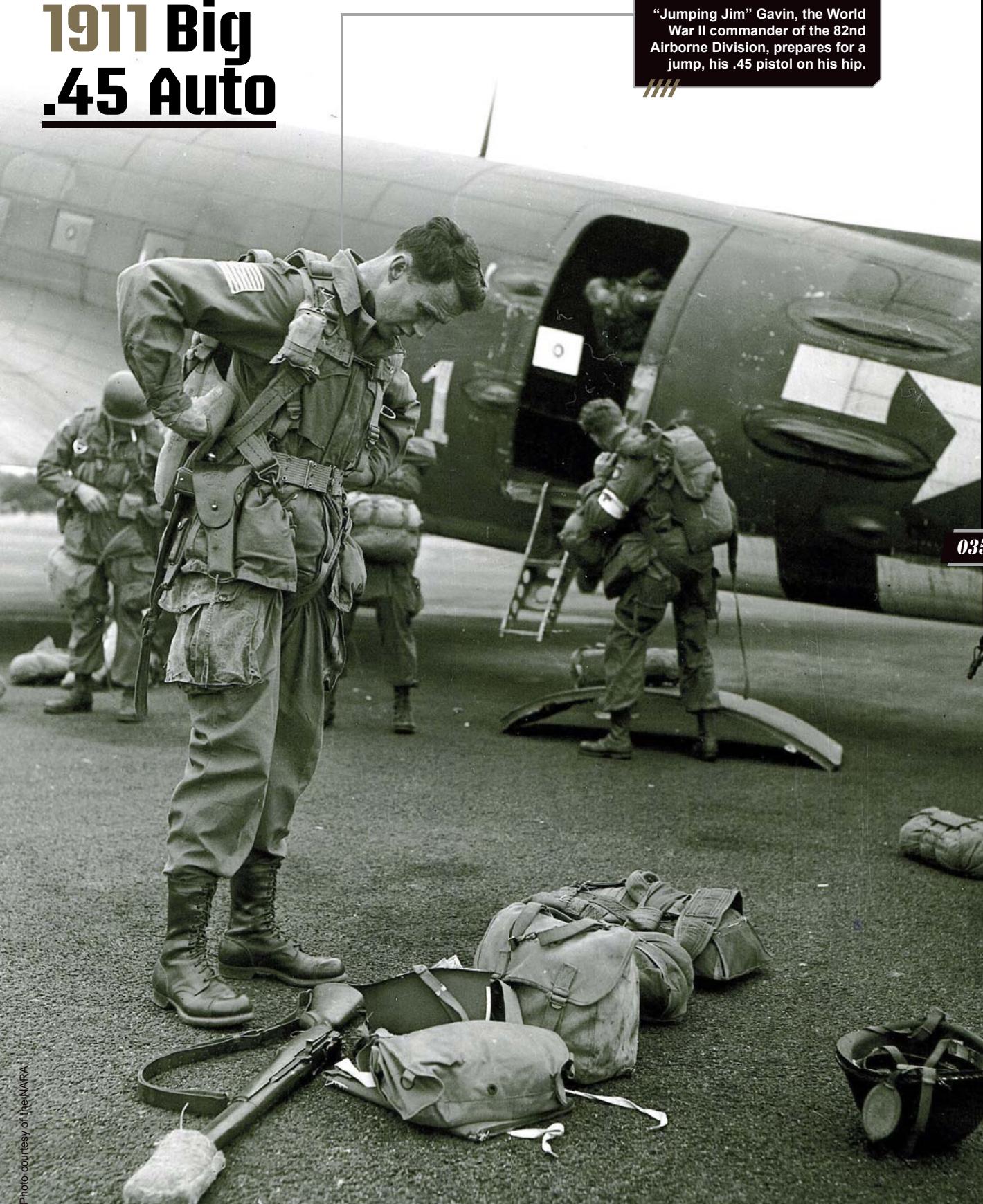
When the first Marines were assigned to Special Operations Command, these MARSOC (Marine Special Operations Command) operators obtained Kimber 1911-type pistols built to their specifications. Today, Colt produces the M45A1 Close Quarters Battle Pistol (CQBP) for the Marine MARSOC, MEU(SOC), Recons and Special Reaction Teams.

### 100 STRONG

Now, more than 100 years after the first Colt 1911 pistols were issued to U.S. troops, Colt is once again evolving the pistol's design for modern U.S. troops. There are various reasons for the continued popularity of the 1911 pistol with frontline troops, but most will say — like their forerunners in WWI, WWII, Korea and Vietnam — that "a big .45 bullet puts the enemy down, and he stays down." **IMS**

# The 1911 Big .45 Auto

"Jumping Jim" Gavin, the World War II commander of the 82nd Airborne Division, prepares for a jump, his .45 pistol on his hip.



035

INSIDE MILITARY SURPLUS

# 100 LEADERS

036  
HISIDE MILITARY SIDEARMS

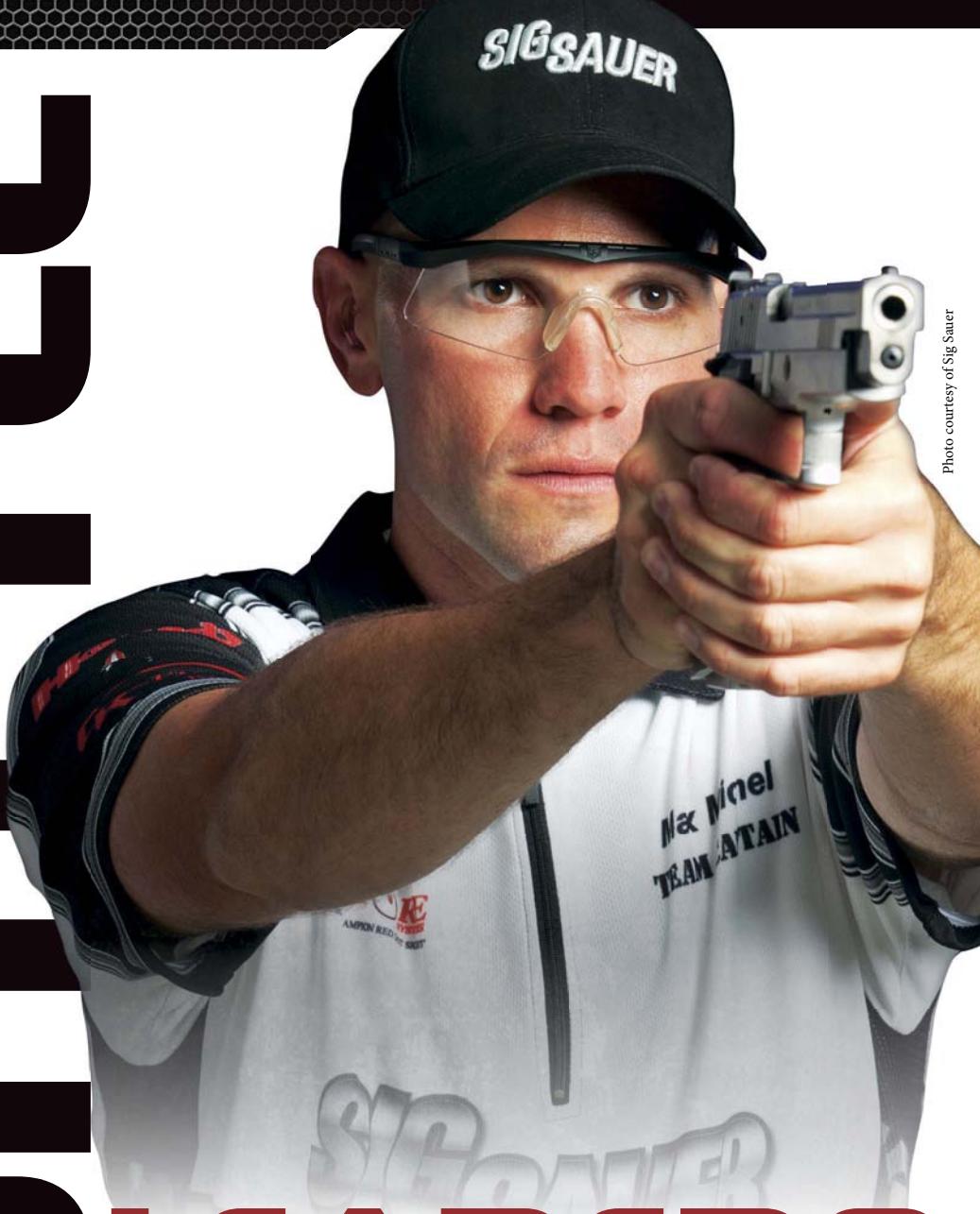


Photo courtesy of Sig Sauer

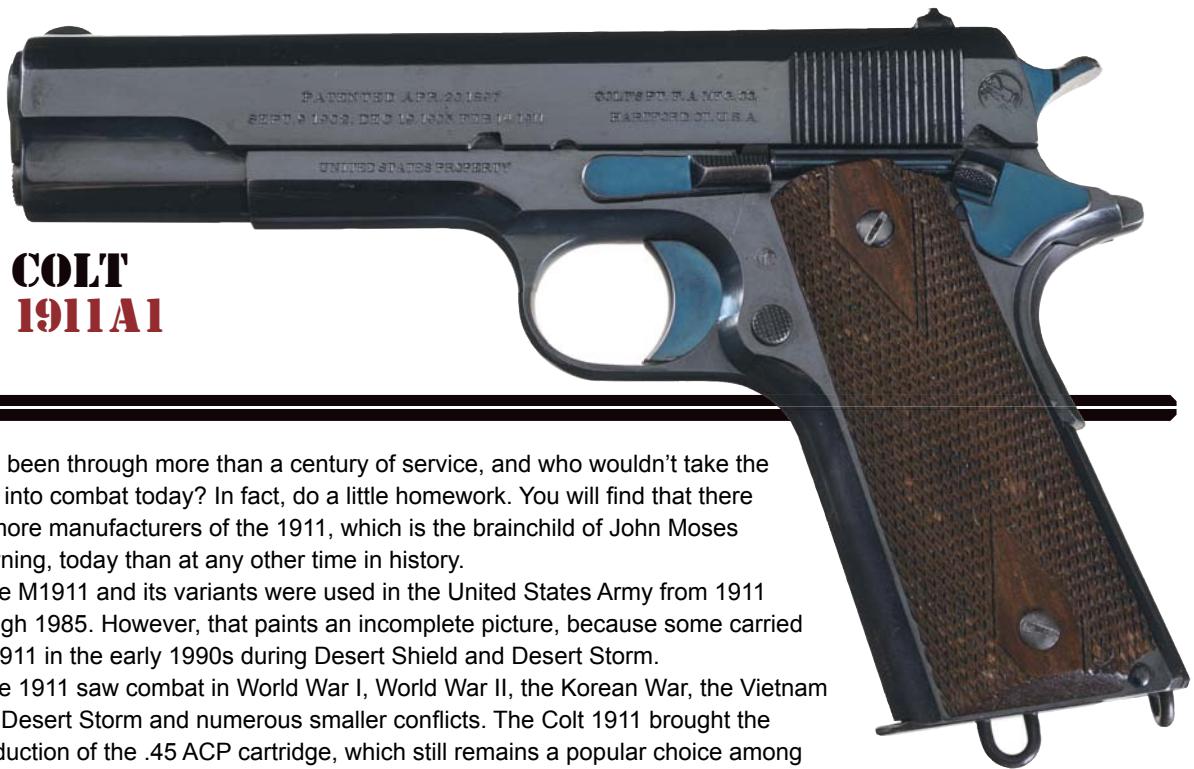
THE TOP 10 MILITARY SIDEARMS OF ALL TIME

**About the author:** Tom Harmony is a freelance writer who is based in the Midwest.

■ By Tom Harmony Gun Photos courtesy of Rock Island Auction Company

**H**ow do you define greatness? In compiling this list, we considered a number of factors, including design, battle performance, cartridge, performance, comparable technology of the day and reliability versus practicality. What's so great? You're about to see.

**"Favored by every elite military or police unit around the world at one time or another, the SIG simply lives up to its 'To Hell and Back' reputation."**



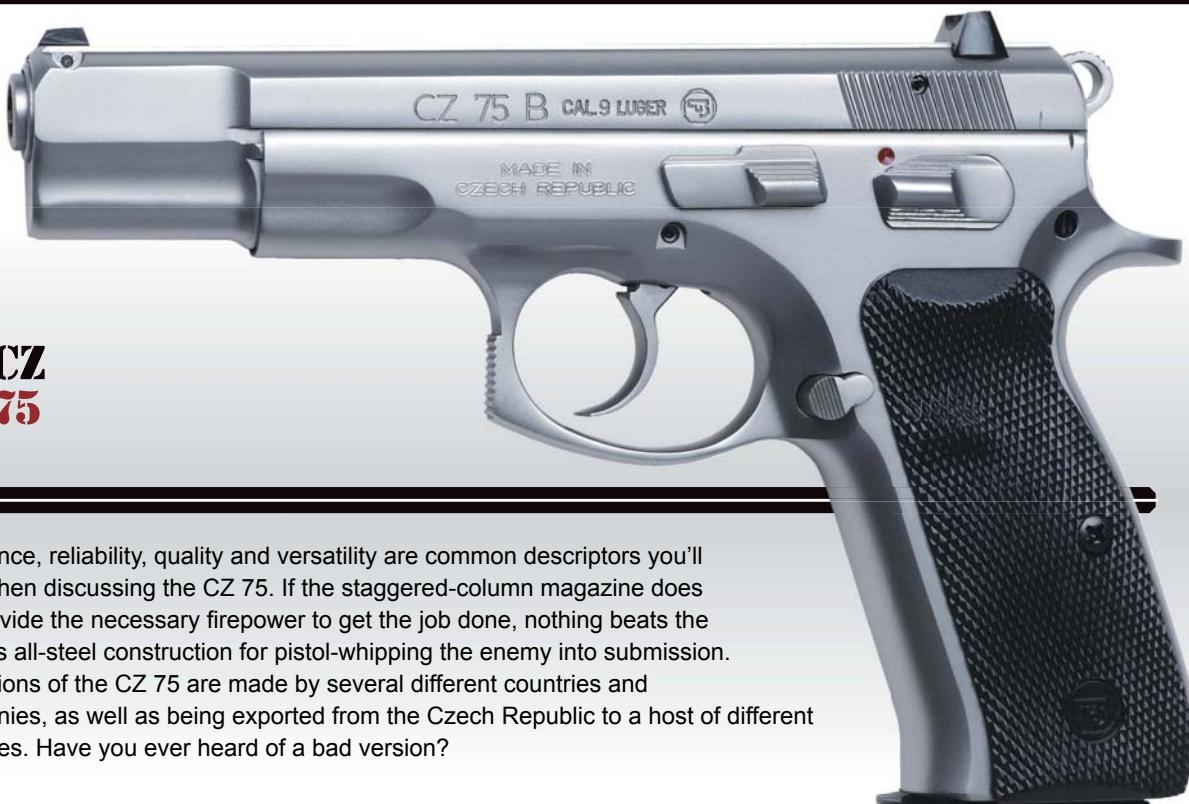
## COLT 1911A1

It's been through more than a century of service, and who wouldn't take the 1911 into combat today? In fact, do a little homework. You will find that there are more manufacturers of the 1911, which is the brainchild of John Moses Browning, today than at any other time in history.

The M1911 and its variants were used in the United States Army from 1911 through 1985. However, that paints an incomplete picture, because some carried the 1911 in the early 1990s during Desert Shield and Desert Storm.

The 1911 saw combat in World War I, World War II, the Korean War, the Vietnam War, Desert Storm and numerous smaller conflicts. The Colt 1911 brought the introduction of the .45 ACP cartridge, which still remains a popular choice among competitive shooters and self-defense enthusiasts.

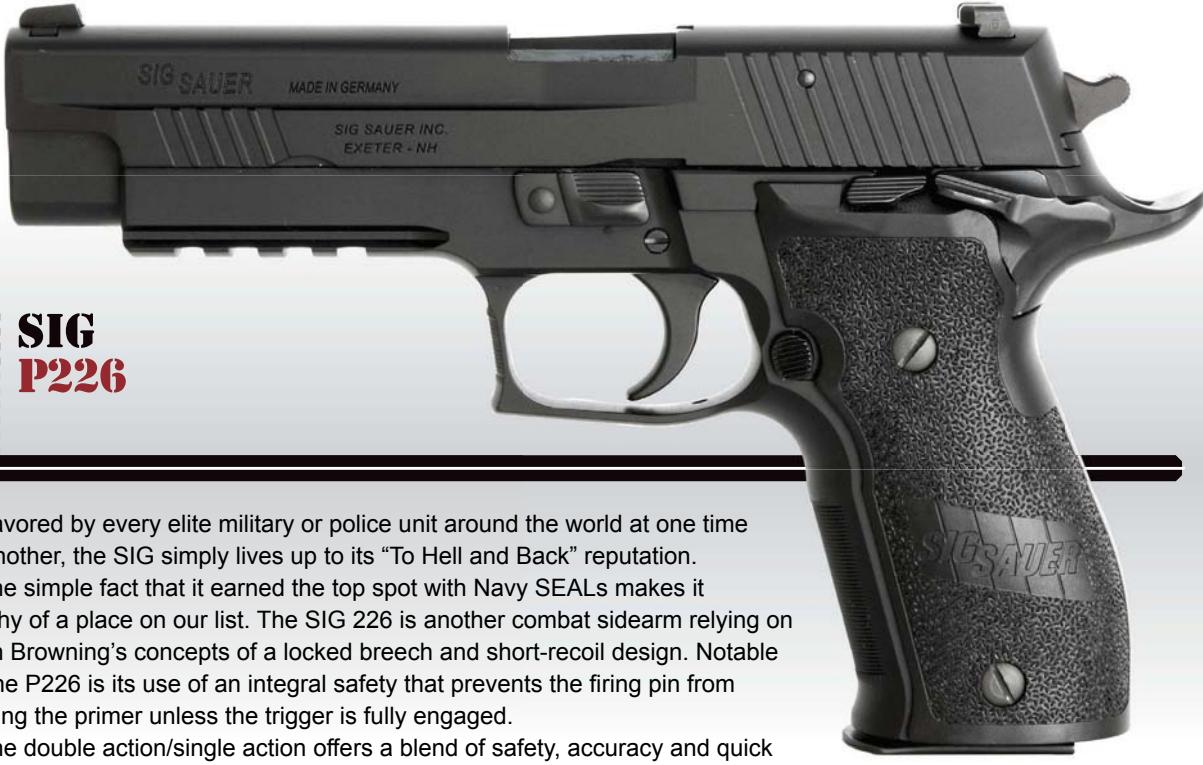
Modern 1911s should have no problem shooting any of the premium self-defense rounds, but good ol' round nose ball ammunition has done the trick for over a century and is just as formidable today...



## CZ 75

Balance, reliability, quality and versatility are common descriptors you'll hear when discussing the CZ 75. If the staggered-column magazine does not provide the necessary firepower to get the job done, nothing beats the CZ 75's all-steel construction for pistol-whipping the enemy into submission.

Versions of the CZ 75 are made by several different countries and companies, as well as being exported from the Czech Republic to a host of different countries. Have you ever heard of a bad version?



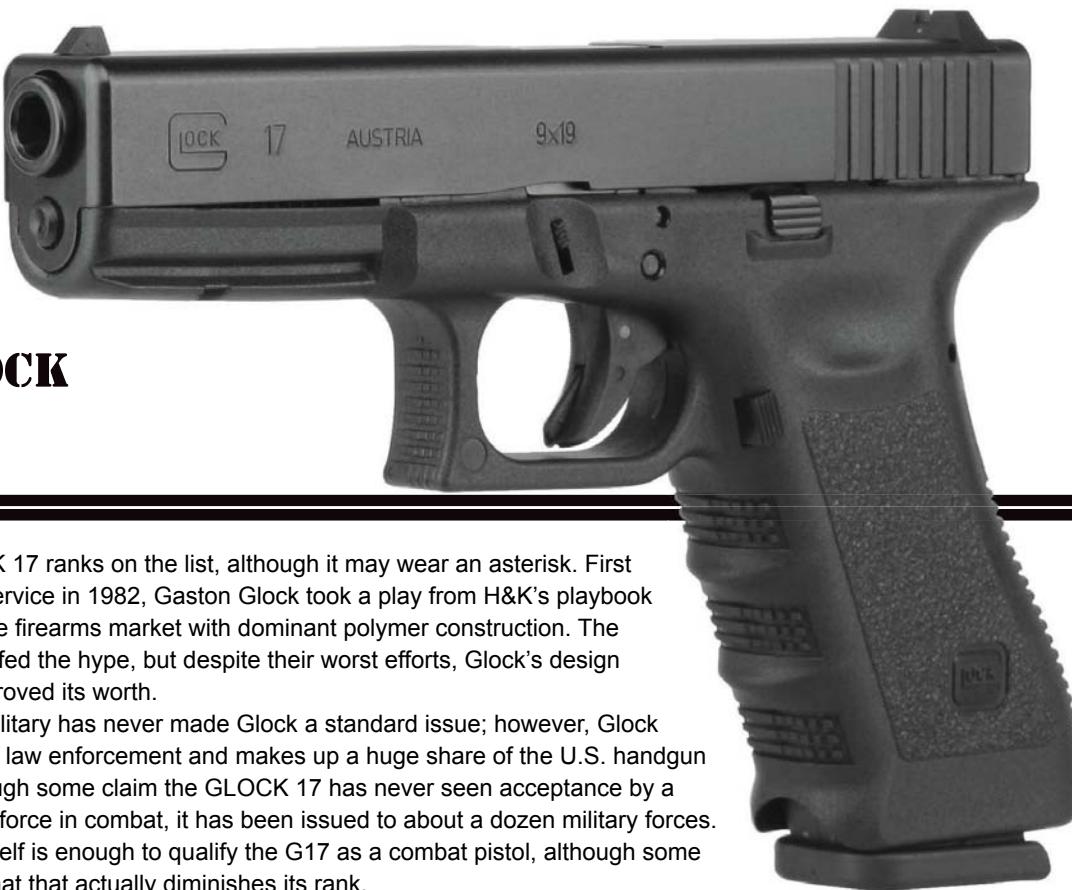
## SIG P226

Favored by every elite military or police unit around the world at one time or another, the SIG simply lives up to its "To Hell and Back" reputation.

The simple fact that it earned the top spot with Navy SEALs makes it worthy of a place on our list. The SIG 226 is another combat sidearm relying on John Browning's concepts of a locked breech and short-recoil design. Notable on the P226 is its use of an integral safety that prevents the firing pin from striking the primer unless the trigger is fully engaged.

The double action/single action offers a blend of safety, accuracy and quick engagement potential. Although the P226 is best known for a steady diet of 9mm, it is also available in .357 SIG, .40 S&W and .22 LR.

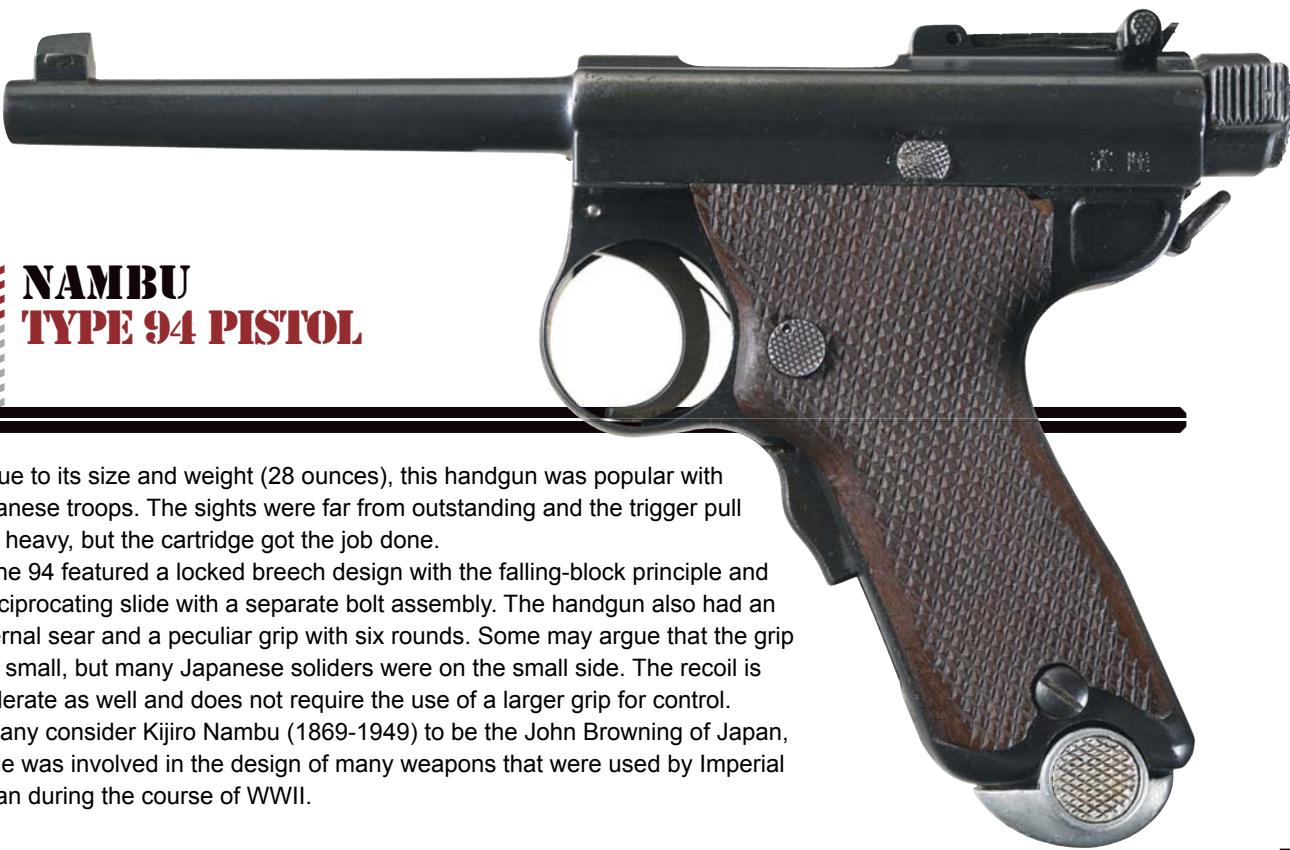
038



## GLOCK 17

The GLOCK 17 ranks on the list, although it may wear an asterisk. First coming into service in 1982, Gaston Glock took a play from H&K's playbook and rocked the firearms market with dominant polymer construction. The media mainly fed the hype, but despite their worst efforts, Glock's design consistently proved its worth.

The U.S. military has never made Glock a standard issue; however, Glock is a favorite of law enforcement and makes up a huge share of the U.S. handgun market. Although some claim the GLOCK 17 has never seen acceptance by a major military force in combat, it has been issued to about a dozen military forces. That fact in itself is enough to qualify the G17 as a combat pistol, although some would claim that that actually diminishes its rank.

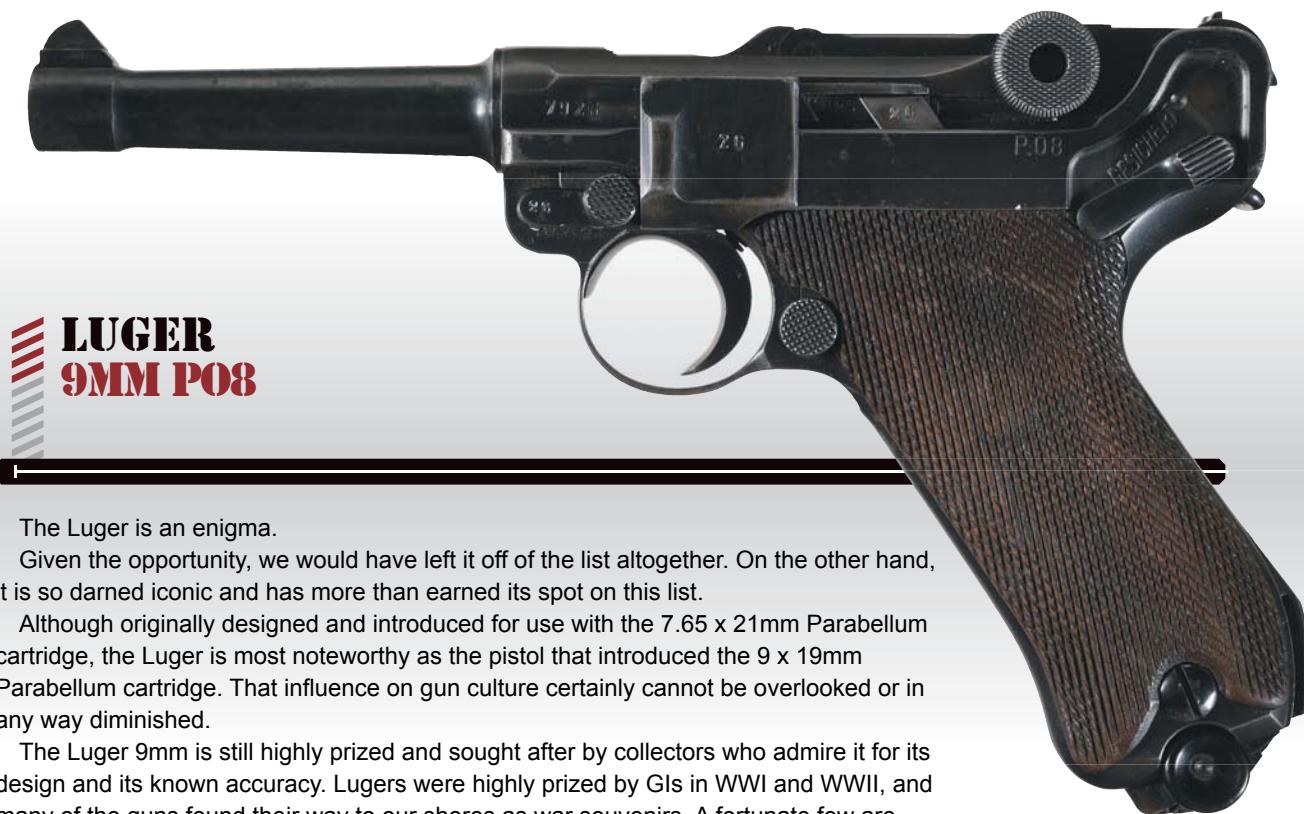


## NAMBU TYPE 94 PISTOL

Due to its size and weight (28 ounces), this handgun was popular with Japanese troops. The sights were far from outstanding and the trigger pull was heavy, but the cartridge got the job done.

The 94 featured a locked breech design with the falling-block principle and a reciprocating slide with a separate bolt assembly. The handgun also had an external sear and a peculiar grip with six rounds. Some may argue that the grip was small, but many Japanese soldiers were on the small side. The recoil is moderate as well and does not require the use of a larger grip for control.

Many consider Kijiro Nambu (1869-1949) to be the John Browning of Japan, as he was involved in the design of many weapons that were used by Imperial Japan during the course of WWII.

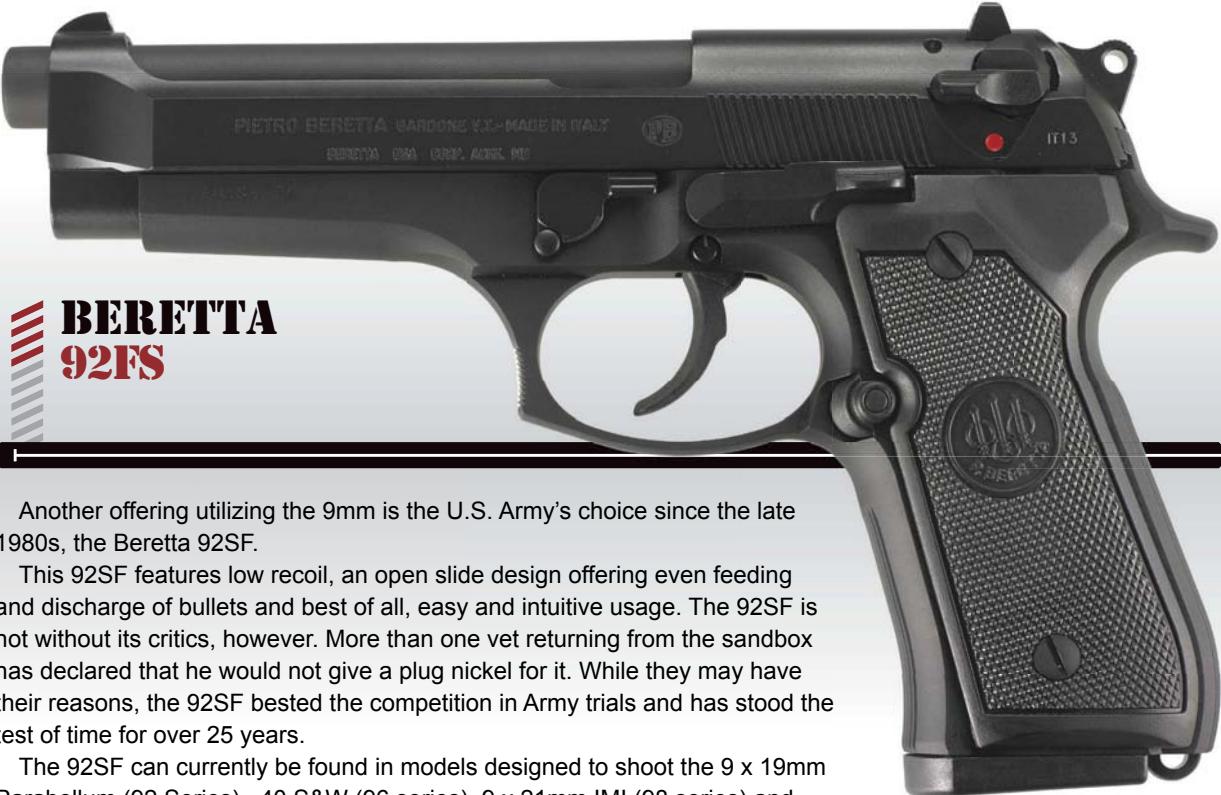


The Luger is an enigma.

Given the opportunity, we would have left it off of the list altogether. On the other hand, it is so darned iconic and has more than earned its spot on this list.

Although originally designed and introduced for use with the 7.65 x 21mm Parabellum cartridge, the Luger is most noteworthy as the pistol that introduced the 9 x 19mm Parabellum cartridge. That influence on gun culture certainly cannot be overlooked or in any way diminished.

The Luger 9mm is still highly prized and sought after by collectors who admire it for its design and its known accuracy. Lugers were highly prized by GIs in WWI and WWII, and many of the guns found their way to our shores as war souvenirs. A fortunate few are still in circulation and can be owned for a reasonable price.



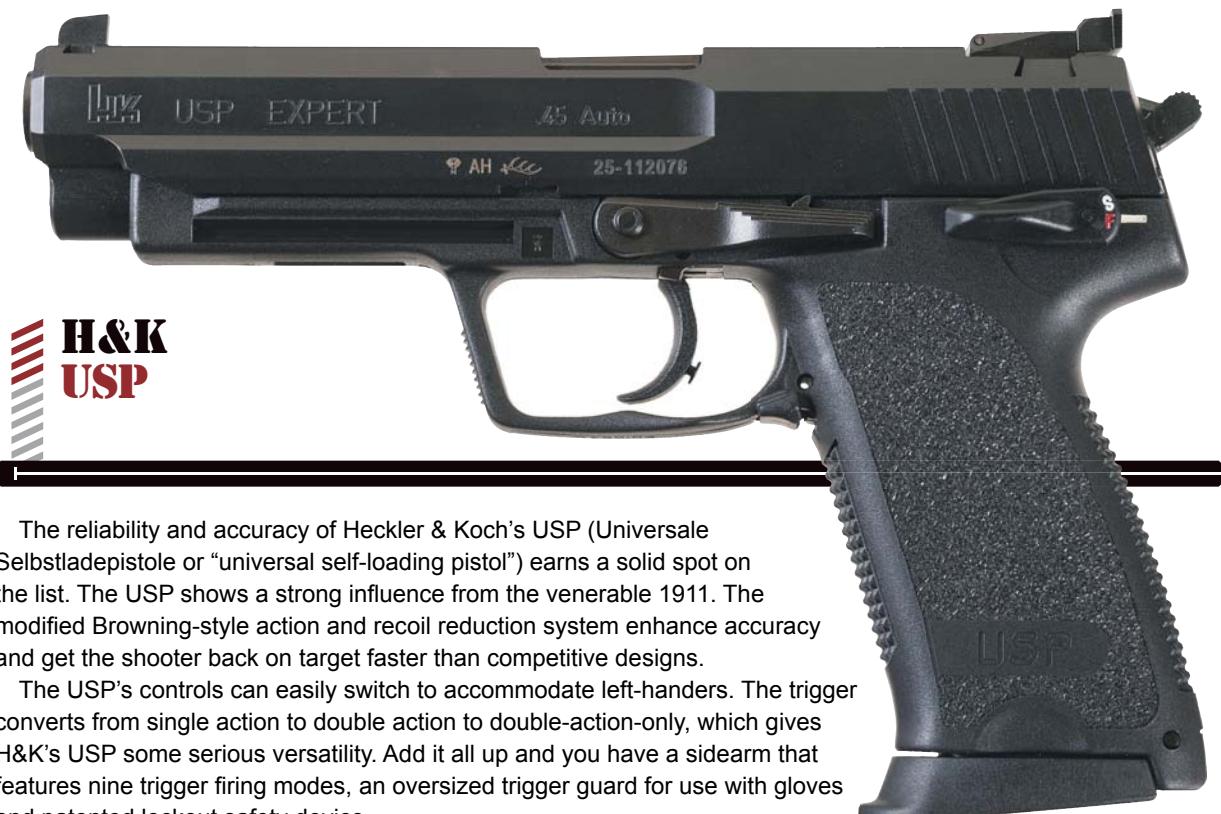
## BERETTA 92FS

Another offering utilizing the 9mm is the U.S. Army's choice since the late 1980s, the Beretta 92SF.

This 92SF features low recoil, an open slide design offering even feeding and discharge of bullets and best of all, easy and intuitive usage. The 92SF is not without its critics, however. More than one vet returning from the sandbox has declared that he would not give a plug nickel for it. While they may have their reasons, the 92SF bested the competition in Army trials and has stood the test of time for over 25 years.

The 92SF can currently be found in models designed to shoot the 9 x 19mm Parabellum (92 Series), .40 S&W (96 series), 9 x 21mm IMI (98 series) and 7.65mm Luger (98 and 99 series).

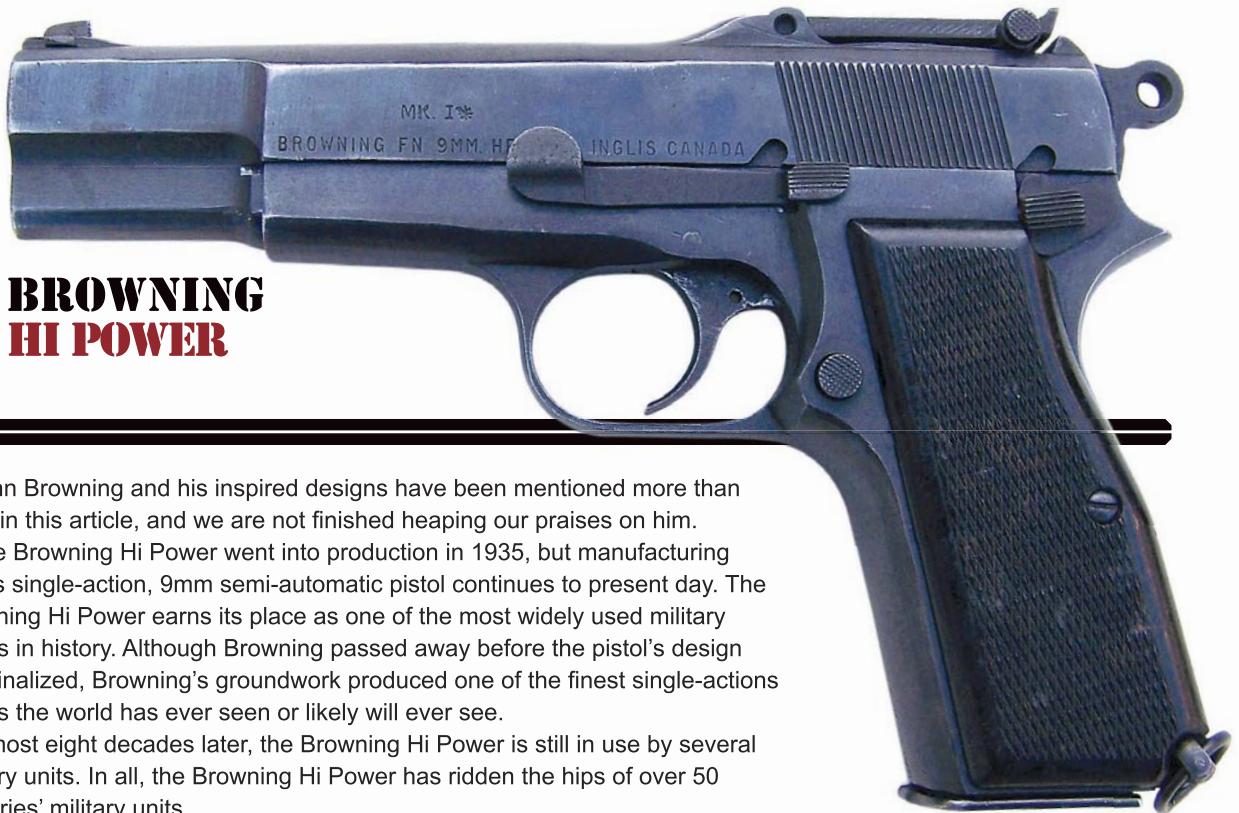
040



## H&K USP

The reliability and accuracy of Heckler & Koch's USP (Universale Selbstladepistole or "universal self-loading pistol") earns a solid spot on the list. The USP shows a strong influence from the venerable 1911. The modified Browning-style action and recoil reduction system enhance accuracy and get the shooter back on target faster than competitive designs.

The USP's controls can easily switch to accommodate left-handers. The trigger converts from single action to double action to double-action-only, which gives H&K's USP some serious versatility. Add it all up and you have a sidearm that features nine trigger firing modes, an oversized trigger guard for use with gloves and patented lockout safety device.



## BROWNING HI POWER

John Browning and his inspired designs have been mentioned more than once in this article, and we are not finished heaping our praises on him.

The Browning Hi Power went into production in 1935, but manufacturing of this single-action, 9mm semi-automatic pistol continues to present day. The Browning Hi Power earns its place as one of the most widely used military pistols in history. Although Browning passed away before the pistol's design was finalized, Browning's groundwork produced one of the finest single-actions pistols the world has ever seen or likely will ever see.

Almost eight decades later, the Browning Hi Power is still in use by several military units. In all, the Browning Hi Power has ridden the hips of over 50 countries' military units.



## C96 MAUSER BROOMHANDLE

The C96 Mauser Broomhandle proved the viability of the semiautomatic pistol in both commercial and military use, and that is no small feat. The C96 utilizes an integral box magazine located in front of the pistol's trigger and likely inspired other modern rifle designs. Other notable features include the C96's long barrel and wooden shoulder stock that also doubles as a holster. The namesake broom handle-shaped grip clearly identifies the C96 as unique, but fortunately not too much of an aesthetic pioneer.

The C96 upped the ante with the 7.63 x 25mm cartridge. The cartridge's potential could be utilized to the fullest when combined with the long barrel and shoulder stock. Together, these features offered a sidearm with superior range, accuracy and penetration potential. The C96 Mauser was produced from 1896 to 1937, and it showed serious longevity by remaining in service from the late 1800s through the early 1960s. During its service life, the C96 was highly favored by British officers and used as a military sidearm in numerous conflicts around the globe and in over a dozen countries. **IMS**



042

MILITARY SURPLUS

# COLLECTOR'S HEAVEN

MAJOR SURPLUS & SURVIVAL IS ONE OF THE LEADING PROVIDERS OF MILITARY COLLECTIBLES

■ By Paul Hantke

**T**alk about a kid in a candy store. The place was huge, and it was stacked to the roof with products, both true military surplus and lots of other stuff that

had been sourced from vendors around the world. I wandered around in fascination, enjoying the smells of canvas and Cosmolene, until my boss dragged me back to the car.

As part of the American Survival Guide staff, we made many more visits in the ensuing years. Much like

Omar's magic tent, the rooms of neat stuff just never seemed to end inside the walls of Major Surplus.

I hadn't set foot back in the Southern California-based store until I began to write this story, and my latest visit left me just as overwhelmed as the first time I went.

# THE SIZE OF MONTANA

Still located at its original address, Major has now acquired the adjacent warehouse and yard and filled them up too. The company occupies more than an acre of space, employs 55 people and offers more than 18,000 line items (SKUs) for sale. Their military surplus line is just as impressive.

The line includes ammo cans, backpacks, blankets, chest rigs, clothing, collectibles, knives, compasses, cots and more. If those options weren't enough, Major also has a subsidiary called Voodoo Tactical that specifically addresses that growing market. Those products include the Voodoo Discrete line of firearms carriers that let you "hide in plain sight." The line includes a standard backpack, briefcase, guitar case or carry bag. They don't scream "gun," and they are engineered to properly secure your firearm, magazines, spare ammo and other gear.

It doesn't stop there. Shooter's accessories include

lights and batteries, goggles, shooting glasses, gloves, knee pads, camo suit yarn or full camo Ghillie suits, coalition desert scarves, sniper veils, face masks, Balaclavas, caps, tactical boots, uniform ID patches and more.

Another separate division of Major Surplus and Survival is their Mil-Spec Adventure Gear. Here you will find reproductions of numerous firearms, grenades and even an RPG grenade launcher. **IMS**





## 30 STRONG

Mike Izzo, the general manager, escorted me on a lengthy tour of the facilities. As you can imagine, it took some time to see it all, and I was impressed by the level of activity in the place. In addition to taking the tour, I got to spend a little time with Mike and pick his brain a bit about the operation.

**IMS:** *How long has Major been in business?*

**Mike Izzo:** There was an original company for 30 years before it became Major Surplus & Survival, but we reorganized to this incarnation in 1991.

**IMS:** *How big is this facility?*

**Izzo:** We cover well over an acre. Most of it is under roof and some of it is in all of the conex boxes you saw stacked out back. And then of course there's parking.

**IMS:** *Where in the heck do you find all of this stuff?*

**Izzo:** All of the military surplus and a lot of the manufacturer's overruns come to us through relationships we have had for years. Since that supply is hit and miss, especially in terms of product selection, we have taken to sourcing lots of items to our specifications from vendors around the world. This allows us to offer a 100% lifetime guarantee on those items because we are sure of what we're selling. If it meets our specifications, we are confident that the product will, indeed, last a lifetime.

**IMS:** *What are your normal best sellers in different categories?*

**Izzo:** For the tactical side it would be gun cases, bags and vests. Camping and outdoors would be tents, blankets and jackets. In general, we sell a lot of our packaged foods and survival kits.



## VISIT THE STORE

If you're into military collectibles, you need to get into Major Surplus. Visit them online. Or, better yet, walk through their front door ... and get overwhelmed like I did.

### MAJOR SURPLUS

435 W. ALONDRA BLVD., GARDENA, CA 90248

800/441-8855

[MAJORSURPLUS.COM](http://MAJORSURPLUS.COM)

## OTHER COLLECTIBLE STORES

### 1 THE COMMAND POST

11650 S. Sam Houston  
Pkwy. West at Belfort  
Houston, Texas 77031  
713-484-5444

[ArmySurplusWorld.com](http://ArmySurplusWorld.com)

### 2 ARMY NAVY SALES

3100 N. Lincoln Ave.  
Chicago, IL 60657  
888-588-8805

[ArmyNavySales.com](http://ArmyNavySales.com)

### 3 COLEMAN'S MILITARY SURPLUS

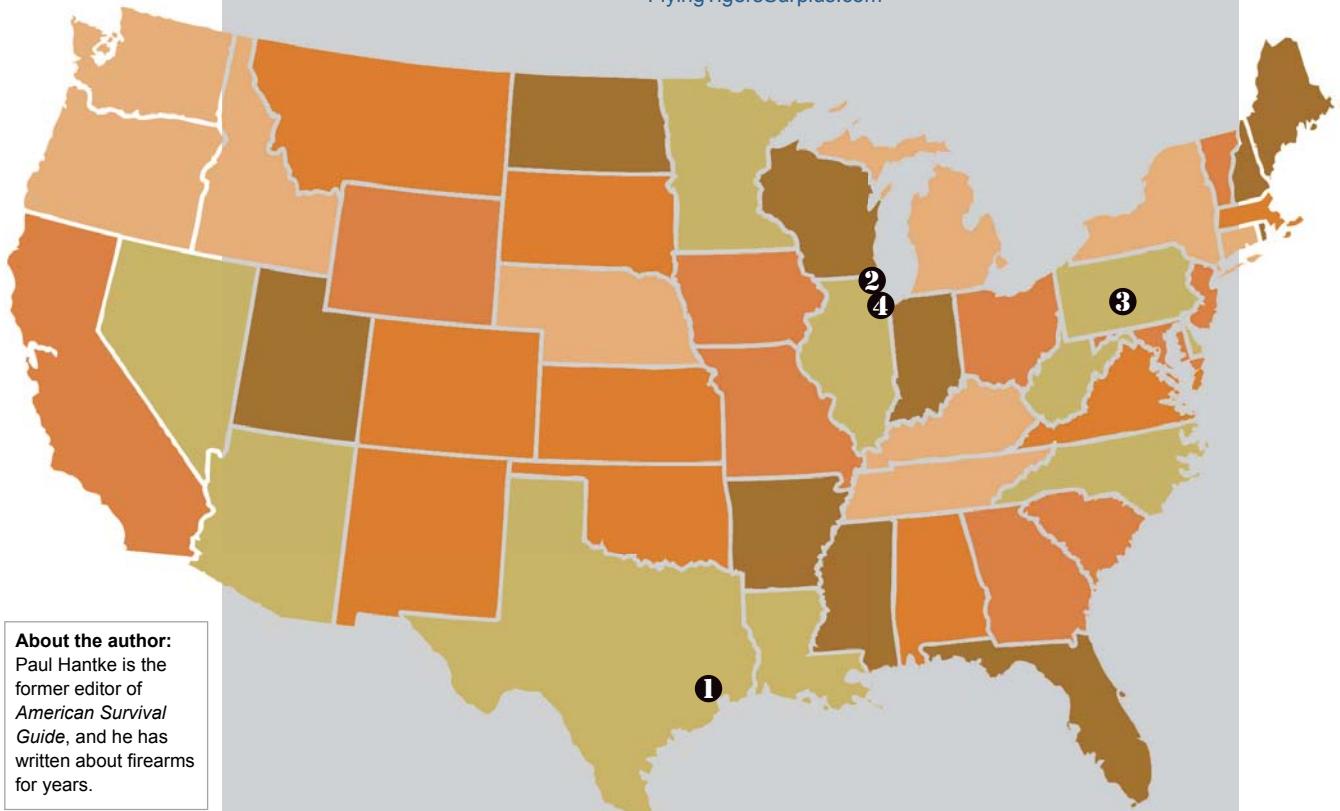
360 Klinger Rd.  
Millersburg, PA 17061  
[Colemans.com](http://Colemans.com)

### 5 ISRAEL MILITARY PRODUCTS

888-293-1421  
[IsraelMilitary.com](http://IsraelMilitary.com)

### 4 FLYING TIGERS ARMY/NAVY SURPLUS STORE

14812 S. Cicero Ave.  
Oak Forest, IL 60452  
708-535-9921  
[FlyingTigersSurplus.com](http://FlyingTigersSurplus.com)



**About the author:**  
Paul Hantke is the former editor of *American Survival Guide*, and he has written about firearms for years.



## WHY I FELL FOR THE M1 GARAND

■ By Stan Skinner

**I**et me tell you about my love affair.

General George Patton called it "The greatest battle implement ever devised." As an ROTC cadet, I learned its nomenclature — gas-operated, clip-fed, semi-automatic, shoulder weapon — along with the serial number of the one assigned to me.

I learned to love the M1 Garand, and this is my story.

### WHERE IT BEGAN

As commander of my university's Pershing Rifles Exhibition Drill Team, I learned to spin and toss the M1 Garand with a fair degree of precision. I also learned to field strip and reassemble it against



the clock, competing against teams from other universities. As I remember, my best combined time was somewhere around 24 or 25 seconds.

The first time I qualified as a U.S. Army Expert Rifleman, the M1 Garand was in my hands. I was an advanced ROTC cadet, and I was attending summer camp in Fort Sill, Oklahoma. It was a memorable day.

During ROTC summer camp, the cadets rotated through leadership positions, and that was my day in

the barrel. I was cadet company commander the day we shot "for record" to qualify as either Marksman, Sharpshooter or Expert with the M1 Garand.

To place things in context, the U.S. Army had recently abandoned the Known Distance (KD) range for marksmanship qualification. In its place was a new qualification course called "Trainfire."

Two different ranges were used for Trainfire. First, you fired on a practice range where you had a firing

lane marked off by two rows of posts. The posts flanked six silhouette targets at marked ranges from 50 to (as I remember) 400 meters, which would pop up one at a time. If you hit the target, it would fall backward, and a scorer sitting behind you would mark down hits and misses.

The "Record Range," where soldiers qualified, was a bit more challenging. The range resembled a battlefield complete with tangles of concertina wire,

shell holes and dead trees here and there on the shattered landscape. The pop-up silhouettes were not at specific ranges, and they were sometimes partly concealed in a shell hole or some other terrain feature. From a loudspeaker on the range officer's tower would come the command, "Shooters, watch your lanes."

Then a silhouette would pop up for a specified number of seconds. Each shooter would have



Back in the day it took the author 25 seconds to field strip and reassemble his Garand.

to spot the movement, aim and fire before the silhouette popped back down.

On my lane, there was a broken tree stump about 300 meters downrange. It looked to be about two feet wide. I glimpsed a silhouette popping up behind it with only about three inches exposed on the left — not much of a target.

Fortunately, the ammo we had been issued had black-painted tips. Since I was a gun nut, I knew that the black tips identified my rounds as armor-

piercing, so I didn't even bother trying to shoot at the exposed edge. Instead I fired through the stump about where I reckoned the silhouette's center of mass ought to be. Bingo!

When I had finished, my scorer remarked that I had been the only shooter to hit that target all day. That distinction added a few more points to my score for the day, which put me in a tie for the honor of high-scoring cadet in the training battalion. Knowledge is power.

Continued Next Page.



---

“... I'll bet there are a few million aging veterans like me, who feel pretty much the same way about the old girl – a great many of whom have a greater claim on affection for her than I do.”

---



The author first "met" the M1 Garand as an ROTC cadet.

## ACTIVE DUTY

By the time I went on active duty, the Garand had finally been retired in favor of the M-14, which later bowed to the M-16. I qualified Expert with both of those rifles, but my first and abiding love was still the Garand. When I finally did a tour in Vietnam, I did not carry any of those three rifles in that combat zone.

I was a commissioned officer and helicopter aviator during my tour. We called ourselves "aviators," not pilots — but that's another story. My primary weapon was a .45 caliber M1911A1. Incidentally, this was against the advice of all of the experienced aviators around me who told me that I needed the .38 double-action revolver that was standard issue to air crew. I was able to show them that their objections were poppycock, and I found an MP unit that would issue me a .45 — but that is yet another story.

Getting back to the M1 Garand — I never carried her in combat, but she was still my first love. Back in the day, I had handled each of her small internal parts. I knew them each by touch. I could make her come apart and put her back together blindfolded. I could make her speak at my command.

She fit me perfectly, unlike the others I dallied with in the Army. I had borrowed moments with her, but I never possessed her as mine alone. That niggling thought remained in the back of my mind for decades, but it never came to pass that I would own her.

One day at a gun show, I had a table with all of my trading wares laid out for inspection. About midday, I saw her, hanging gracefully on the shoulder of another man. Somehow, I knew she was the one. When he paused at my table, I casually inquired whether she was for sale. He nodded, and passed

her over to me. She was a beauty.

A glance at her receiver's rear end told me she was an International Harvester — a rare and desirable type. Without going in the details, let it suffice to say that some of the items on my table went away with him, and this beauty was mine at last.

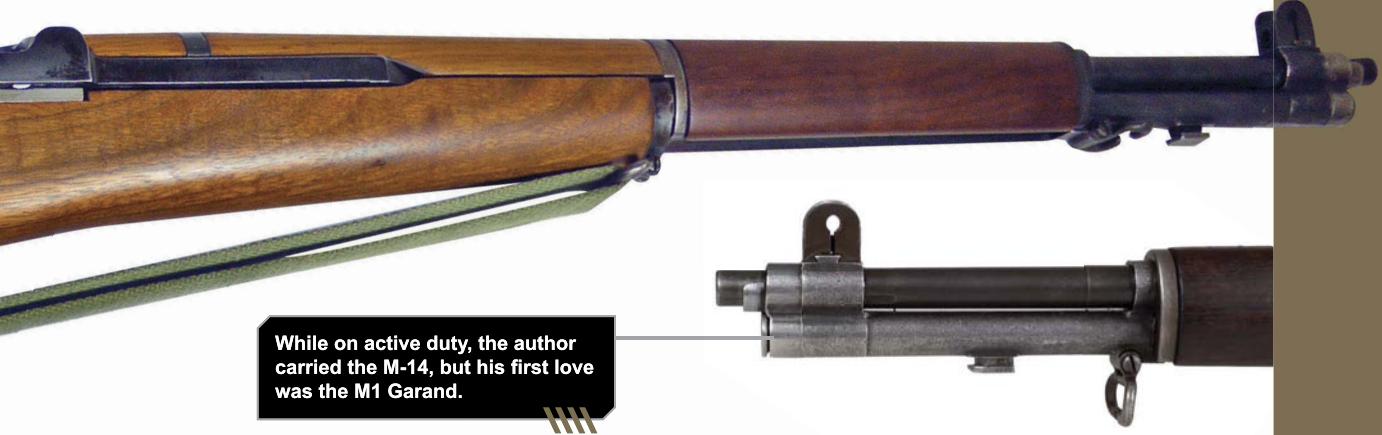
Later, at home, I gently began to strip her, and the components parted reluctantly, sticking together instead of separating smoothly. I realized that they did not have the oiled familiarity of a well-used mechanism. She had hardly ever been used and might even be a virgin.

I knew then that I would never bring myself to sully this beauty with the powder residue and grime of a firing range. I would keep her on a pedestal and find another to take my pleasure with as she again spoke at my command.

Oops, I'm beginning to sound a bit creepy here. But I'll bet there are a few million aging veterans like me, who feel pretty much the same way about the old girl — a great many of whom have a greater claim on affection for her than I do.

I did find another M1 Garand to love. This one is a Springfield, which is much more commonly found, but it is nonetheless a beautiful model. She had been cared for lovingly and used sparingly, so I would have no qualms about taking her to the range and then touching off a few.

Her previous owner was desperately in need of cash, and it was with great reluctance that he parted with her. I might have even seen a little moisture in his eyes as he handed her to me. Nevertheless, I would give her a good home next to her sister.



## ONE MORE PROBLEM

Now, I find I have another problem.

You see, on the aft end of the gas cylinder on an M1 Garand is a "C"-shaped stacking swivel. It is designed to link with the stacking swivels of two other Garands, which allows soldiers, in groups of three, to set their rifles aside without laying them down in the dirt or mud. So stacked, the three rifles form a tripod, with only the heel of the butt(s) touching the ground.

My problem is that you need three M1 Garands to stack arms, and I only have two. Now, what should I do about that, hmm? **IMS**

**About the author:** Stan Skinner is a veteran firearms writer and the author of *Modern Sporting Rifles*.

# GET YOUR OFFICIAL GUN WORLD T-SHIRT TODAY!



**GUN WORLD**

BUY THEM ONLINE AT [ENGAGEDMEDIAMAGS.COM](http://ENGAGEDMEDIAMAGS.COM) OR CALL US AT 800-764-6278

100% Pre-Shrunk Cotton \* Black Shirt with Gold and Grey Screen Print



# WEAPONS

TWO CLASSIC GUNS, REIMAGINED FOR A WHOLE NEW GENERATION OF COLLECTORS

■ By Brad Fitzpatrick Photos By: Brad Fitzpatrick

**I**ong before the AR-15 and Beretta M9 became standard arms, the soldiers of World War II fought with the legendary M1 Garand and the trusted 1911. Now, Citadel offers shooters an exciting way to relive history with its new rifle and handgun offerings.

There will never be another battle like WWII. It was immense in size and scope, with battles being fought around the globe between Allied and Axis forces that had weaponry unimaginable only a century before. Planes filled the skies in Europe and the South Pacific dropping bombs that could, in the blink of an eye, produce destruction previously unimaginable. The M4 Sherman Tank was equipped with a 75mm weapon capable of destroying buildings and bridges. It was a new world, a new war and a new reality.

But for the basic American infantryman, these were not the true weapons of the Second World War. Those men

fought with what they could carry, and they carried M1 Garand rifles and 1911 semiautomatic handguns. As the soldiers marched on foot, inch by miserable inch, these were the guns that cleared the beach at Normandy; the weapons that saw the Allied troops through the battlefields of Western Europe and southern Asia on their conquest to restore order to a shattered world. Today's weapons of war are far different from those employed during World War II, but the guns carried by General Patton's men are of no less interest for collectors and shooters today than they were back then. For those of us with a special affection for the guns of that period, the M1 and the 1911 are still exciting and fun to shoot.

Citadel is now offering two new guns that pay homage to those classics, and they're available at a price that doesn't demand that you have a hefty savings account or take out a second mortgage on your home. They're also a great deal of fun to shoot and remain practical for many modern-day applications.



# OF WAR

## THE GUNS OF CITADEL

Citadel's guns are imported by Legacy Sports International in Reno, Nevada ([www.legacysports.com](http://www.legacysports.com)). The newest additions are the M-1 Carbine, which is available in 9mm or .22, and the latest Cerakote version of the company's trusted 1911, also in 9mm as well as .45 ACP. The rifle is compact and light, with an overall weight of 5.8 pounds and an overall length of 35 inches, making it easy to carry and fun to shoot. The 1911 is, simply put, a 1911: one of the finest pistol designs of all time and a marvel of firearms engineering that is probably more

popular with civilian shooters today than it was at any time in history. The new Citadel 1911 9mm also receives a sleek two-tone Cerakote ceramic finish that is impervious to the elements and doesn't need anywhere near the level of care required by a blued gun. They're an effortlessly cool pair, and deserve a spot high on your list of "fun guns" — the weapons that always seem to make it into your vehicle when you're headed to the range. MSRP on the M-1 9mm ranges from \$539 for the synthetic stock to \$699 for the wood stock, while the 1911 retails for \$741.



The Carbine's short overall length makes it a handy rifle, perfect for backyard target shooting. It's also fun to shoot. With both of these guns and a box of 9mm ammunition, the author had a great time popping targets out to 50 yards.



## M-1 CARBINE

The M-1 is a light, quick-pointing carbine that is made by Chiappa of Italy and features a blowback action. It comes supplied with two 10-round Beretta 92FS-style magazines. Additional 10-round magazines are available for \$26, and a 17-round version is also available from Legacy Sports and costs \$29. You can opt for the less-expensive, durable synthetic-stocked version or get the wood stock for about \$150 more. For my taste, the wood stock is the best way to go because it has the look and the feel of the original.

The wood isn't fancy or glamorous by any means, but I looked through several images of rifles from that era and the stock on the Citadel looks very similar in grain and cut. In my opinion, resemblance to the original legend is more important than fancy walnut. The Citadel M-1 has a steel butt plate (again, like the original) and a sling cutout near the rear portion of the stock. The sights are also similar in design to the original, with a barrel-band front blade sight with shields and an adjustable aperture sight mounted near the rear of the receiver.

Adjustments on the gun are quick and easy, and a scale allows you to accurately adjust for windage. The safety is a rotating design on the right front portion of the trigger guard, and there's a large, easy-to-access

magazine release butting located in front of the safety in the magazine well. The 10-round magazine is different from the original, but it is easy to load and manipulate.

The M-1's action is a very simple blowback-design that does a good job handling most loads. The action handle is large and curved, properly positioned to match the original, and it's a far less complex design than what you'll see on more modern rifles — certainly nothing like the gas systems found in today's ARs. The handle slides the entire rear portion of the action back to chamber cartridges, and the Citadel is well-regulated to handle most standard 9mm loads — though it did hang twice with very light loads. The rifle was particularly fond of the newer defensive 9mm loads, namely the Hornady Critical Defense and the Federal HST. With those loads the gun worked like a charm every time.

If you like to shoot (and I'm guessing you do), the M-1 is a wonderful little gun, with so little recoil and muzzle rise that even a young or inexperienced shooter can enjoy plinking for hours with this rifle. Prior to testing the M-1, I was shooting a bulky and heavy bolt gun from the bench at 100 yards, measuring groups, trigger pull, velocities and all of the other minutiae that are part of the process of testing long-range rifles. The M-1 was

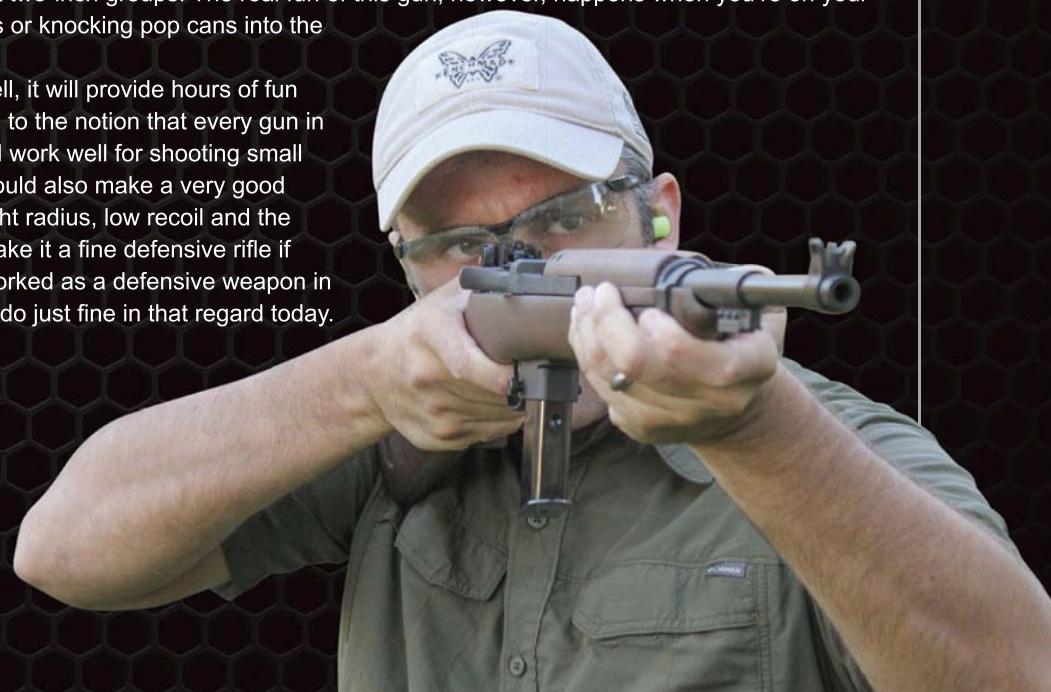


**Legacy Sports** in Reno, Nevada is the importer for both the M-1 Carbine and the M-1 1911. While these guns offer a historic look and feel, they're also functional and fun to shoot.

different—a total joy. I tried it out on spinning targets, bulls-eye targets and soda cans propped up downrange. The sights are rudimentary but effective, and I've always liked the aperture design for rapid target acquisition and quick follow-ups. Since the M-1 is a carbine that shoots a pistol-caliber cartridge over iron sights, I tested it at 50 yards from a seated position, and it shot two-inch groups. The real fun of this gun, however, happens when you're on your feet and engaging multiple targets or knocking pop cans into the air while lying prone.

What's it good for, you ask? Well, it will provide hours of fun on the range. If you are dedicated to the notion that every gun in your safe needs a calling, it would work well for shooting small vermin at close range. I think it would also make a very good home defense gun; the longer sight radius, low recoil and the M-1's love of defensive rounds make it a fine defensive rifle if that's your desire — it certainly worked as a defensive weapon in the Second World War, and it will do just fine in that regard today.

At 5.6 pounds, the trigger is a bit heavy for a target rifle. However, it works very well for backyard shooting and plinking. This is a gun that's easy to love, and I doubt you'll manage to put a few magazines through one without thinking about how much fun it would be to own it.



## M-1 1911 CERAKOTE

The Colt-designed 1911 semiautomatic, recoil-operated pistol is one of the greatest handgun designs of all time. It served as the primary military sidearm from 1911 to 1985, providing soldiers with the backup firepower they needed in a compact, robust design. I won't heap any more praise on the 1911 — since it speaks for itself — but the Citadel Cerakote version is a handsome, reliable and functional iteration of the original. It looks like a standard 1911 in most regards, with the most striking variation from the normal design being the addition of the tough, two-tone olive-drab-and-black Cerakote finish. Cerakoting has become very popular, and for good reason. The ceramic finish is extremely tough and rugged — the perfect complement to the 1911's personality.

Citadel's Cerakoted 1911 is available in .45 ACP or 9mm. For this test I used the smaller gun, to match with the M-1 Carbine. I headed to the range with a big box of 9mm loads to see what the Citadel was capable of doing. It features an extended beavertail grip safety, a skeletonized hammer and trigger, sturdy, black, low-profile sights that are dovetailed into the receiver and well-textured wooden Hogue grips. In addition, the gun also comes with an additional set of grips that have a less-aggressive texture — a nice touch on an already well-priced 1911.

The Citadel 1911 comes with two eight-round magazines and a durable carrying case. In 9mm, the slim, five-inch 1911 is a pussycat, easy to shoot and ready for quick double-taps. I was surprised by how much I enjoyed the trigger on the factory gun. Hardcore 1911 shooters will probably want to switch it out for something lighter, but it broke clean at just over five pounds and made delivering accurate shots easy.

The version I tested functioned well with every defensive load, but it did hang up a couple of times with very light target loads. However, when I used Hornady's Critical Defense and Federal's HST ammo, it performed just like the Carbine, meaning that it fired every time I pulled the trigger. I shot it from the bench at 25 yards and was impressed by the accuracy: the Hornady

loads went 1.73 inches on average, and the Federal stuff grouped just under two inches.

The gun I tested was the black/olive drab version, but it's also available with pewter and black and brushed stainless and black finishes. Some models also have the option of soft-touch Hogue OD green grips. Barrel lengths in both .45 and 9mm are either 3.5 inches or the standard five inches, so no matter what you're seeking, you can find a gun that suits you. The smaller versions are obviously slanted for concealed carry, but I had no trouble toting the full-length version around. I also didn't have to worry about sweat and moisture ruining the finish. Like the M-1, this 1911 is a great target gun. If you're looking for an inexpensive defensive 1911 that will stand up to daily carry, you need to try out this offering from Citadel.

WWII was undisputedly one of the most important wars in our country's history, and holding these two guns gave me a new respect for the men who fought in that engagement. It also felt good to know that 70 years later, the heritage of that conflict still lives on in these two firearms. If you're a history buff with a love for shooting, then these two guns are definitely for you.





The 1911 was the American military's sidearm of choice from 1911 to 1985, and the design remains popular today. Citadel's version is available with or without a Cerakote finish, and it is chambered in 9mm or .45. It's also available in barrel lengths of 3.5 or 5 inches. The 5-inch 9mm is shown here with two-tone black and olive green Cerakote.

At \$741, the M-1 9mm is relatively inexpensive for a new 1911. It comes with many additional touches that only add to its value, including a skeletonized hammer and trigger, beavertail grip safety, low-profile sights and a Cerakote finish.



## ACCURACY

058

GUN	SMALLEST GROUP	LARGEST GROUP	AVERAGE
M-1 Carbine (50 Yards)	1.24 inches	2.08 inches	1.46 inches
M-1 1911 (25 Yards)	1.18 inches	2.14 inches	1.73 inches



## CITADEL M-1 CARBINE

### ACTION

Blowback Semiautomatic Rifle

### STOCK

Wood, Synthetic

### SIGHTS

Adjustable aperture rear, blade front

### CALIBER

9mm

### CAPACITY

10, 17

### WEIGHT

5.8 Pounds

### MSRP

\$531 - \$699

## CITADEL M-1 1911 CERAKOTE

### ACTION

Semiautomatic Recoil-Operated Pistol

### FINISH

Two-Tone Cerakote

### SIGHTS

Low-profile fixed rear and blade front

### CALIBER

9mm, .45 ACP

### CAPACITY

7, 8

### WEIGHT

2.3 Pounds

### MSRP

\$741

## HOW MUCH DOES BARREL LENGTH AFFECT VELOCITY?

Conventional wisdom tells us that longer barrels produce higher velocity, and this is why Magnum rifles require 24- or even 26-inch barrels to wring out maximum velocity from hot cartridges. So how much does the difference in barrel length change the velocity of standard 9mm ammunition between the M-1 1911 and the M-1 Carbine?

Tested over a chronograph, the M-1 1911 fired Aguila 124-grain FMJ ammunition at an average velocity of 1,039 FPS. That same ammunition delivered an average velocity of 1,168 FPS from the longer (18 inch) M-1 barrel. That additional 130 FPS is lower than the 150 FPS-per-inch that many rifle shooters claim as the rule. But why is this?

The answer lies in the fact that barrel length is a game of diminishing returns. The 9mm cartridge contains much less powder than other, higher velocity rifle cartridges, and once the available powder is burned in the barrel, additional barrel length doesn't yield the same velocity increases. Still, you can expect the longer carbine barrel to improve velocities compared to 9mm handguns.

## LEGACY SPORTS OTHER OFFERINGS

Legacy Sports International imports a number of quality firearms in addition to its Citadel offerings. Legacy Sports is also the source for Howa rifles, which are made in Japan. These rifles have a very solid reputation with serious shooters, and they come with a push-feed, one-piece bolt with dual locking lugs, a three-position safety and excellent triggers. They're also very reasonably priced, and available in chamberings from .204 Ruger to .375 Ruger. The company also offers Escort semiauto and pump shotguns in a variety of configurations and styles that are sure to please the upland hunter, big-game hunter, competitive shooter and home defender.

The Escort semiauto uses a proven gas operating system and handles shotgun loads from 2 3/4 to 3 1/2 inches, depending upon chambering. They're also available in a number of camouflage patterns for the ultimate in concealment. Additionally, Legacy Sports offers Pointer over/under shotguns for a budget price, and these stackbarrels perform well on the range and in the field. For a complete listing of Legacy Sports' many offerings, visit their website at [www.legacysports.com](http://www.legacysports.com) or call them at 1 (800) 5-LEGACY.



# Combat Helmets

THE EVOLUTION OF HEADWEAR IN THE WORLD'S MILITARY

■ By Jeff Thompson

**T**hings change, and the world of military gear is no exception. World War I began in the summer of 1914. Much of the gear and accoutrement material at the beginning of that war was decorative. However, four short years later, almost everything had changed. And virtually every item of gear, while very different from today's streamlined equipment, could be at least recognized today.

The Second World War likewise changed everything,

though not quite as profoundly. In both of those massive conflicts, tens of millions of personnel were under arms. This particular epistle is about gear in general, emphasizing helmets. These matters alone could be the subject of several major books, and frankly, from musette bags to packs, all this writer could offer would be summaries from five decades of observing and collecting — some would say more accurately accumulating — paraphernalia from all over the world. Helmets are my specialty, and they will be the touchstones of this brief synopsis.

Continued Next Page.



U.S. soldiers are wearing the PASGT helmet.

## THE BEGINNING

Before we move into helmets, we'll touch on a few related topics that have also undergone changes.

Neither cotton webbing nor leather has completely disappeared from cosmopolitan field gear arrays, but they're surely on the wane, replaced mostly by synthetics. Plus, a great deal of equipment and casing applications, which were once pure cotton, are now using blends with synthetic fibers that seem to offer lower maintenance.

Sixty years ago zippers were the answer to almost all military uniforms and gear access. Now they have begun to fade, replaced in many applications by Velcro and other slip closures. Velcro is still very popular today, but current military personnel advise me that buttons are slowly slipping into somewhat more common usage. Velcro tends to clog and is not always easily cleaned out — especially in darkness. Velcro also isn't known for being especially quiet (a problem largely avoided by the use of buttons), but new polymer zippers do come quite close to silence.

These are all minor observations in the grand scheme of things, and they seem to apply less in countries that are less impacted by western trends.

The line and reflection-controlling forms of camouflage 60 or 70 years ago — often the mark of specialist or elite personnel — have become far more common in virtually all countries. At the beginning of World War I, typical bayonets fielded featured blades from around nine inches in length to as long as 20 inches. While some countries, like Switzerland and Germany, attempted to generate multiple-purpose rifle-mounted cutlery, virtually all of the larger powers deemed a bayonet to be suitable for nothing more than poking holes in people. The bayonets weren't run very hard or differentially heat-treated, since they were regarded as spear points or pike substitutes, and the metal was never intended to hold an edge or cut much of anything. Many of them, right up to some AKs, were folding, tube-style "toad stabbers" with no pretension to ever be used as anything else.

Continued Next Page.



This 1938 photo, taken during an inspection, showcases the German M1933 Stahlhelm.

## THE M4 BAYONET

The British "spike" bayonet for the #4 rifle was designed late in World War II.

It was spun off from a combat knife designed for non-rifleman personnel, but for the first time in a large army, it led to the trend which dominates today: the multi-purpose knife bayonet. It even included a self-sharpening sheath, and the hardness standards for the shorter 6.5-inch blade (11 1/2 inches overall) called out a level capable of actual cutting. These shorter blades featured far higher tensile strength, too.

All U.S. bayonets for infantry rifles from about that time forward, save the very last of the M1s, shared the same blade design with the M4 — even those that served and still serve full-length M16s and variants.

Many other nations followed suit. England's Bowie-style #9 had a formidable knife blade, but no built-on grip. These models entered serial production in 1947, although photos exist of something very similar attached to rifles late in World War II. I am advised by some that those were either homemade or prototypical. It is also possible that the photos were not actually taken in wartime. The seemingly novel idea of an even more multi-purpose bayonet is very old, but may have reached its zenith in Eastern Europe with bayonets cut with an eyelet to form wire cutters and possibly even other tools.

There is always some danger of breakage with harder — that is, more brittle — metals, but the tradeoff is straightforward. Every additional function added means one less heavy and less easily lost piece of ancillary equipment to service and safely store. A retired U.S. officer remarked to me not long ago, "An ordinary infantryman might 'lose' a gas mask or wrench, but even in the rear, he's very unlikely to forget his mess kit."



This U.S. soldier is shown with a carbine bayonet.

## COMBAT HEADGEAR

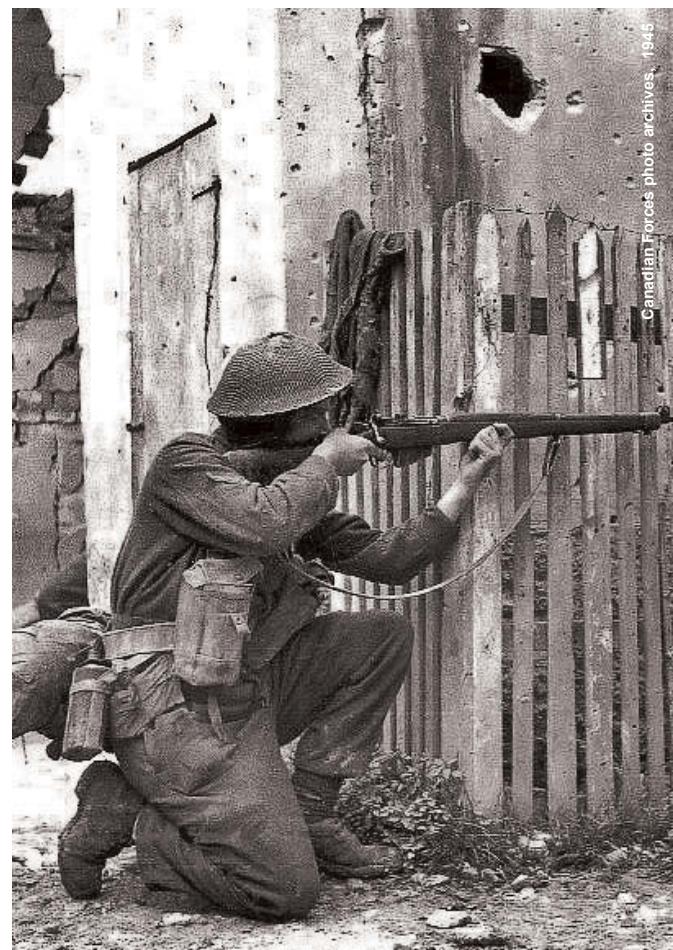
It always seems startling to historians that despite the development of accurate rifled artillery, better high explosives, the machine gun and the proliferation of mortars, there was no truly protective headgear at the beginning of WWI. Indeed, the first type to see issue was the segmented, billed French Adrian pattern, model of 1915. This concern would be soon addressed. These French models were mild steel and lighter than later German and British patterns, weighing in at about 27 ounces. The German Pickelhaube spiked helmet and the French cuirassier headgear were primarily decorative, although they provided some protection against falling shrapnel.

Italy, Russia and many others used the French helmet, sometimes producing close copies. Italy later developed a better, more compact headgear, the Model of 1933, and Russia (called the Soviet Union after the Revolution) developed the advanced Model of 1936 that offered better ear protection. Trimmed and streamlined for mass production, the 1936 became the M40, a helmet very similar in profile to the U.S. M-1 but with an integral liner. Produced in slight permutations by many Warsaw Pact nations during the Cold War, these still show up all over the world.

The Japanese Army used a modified spin-off of the Adrian until their revised design of 1932 combined features of the British "Brodie" and the German helmet came along. The Japanese helmet is often incorrectly described as derivative of Samurai gear, which is patently false. Only the tied chin strap flows from the older tradition. Their 1932 Tetsu-Bo Type 90 was in many ways a Brodie, extended downward, with the rim almost entirely excised. Made of magnesium steel and often run a little too hard, it was a better-than average design for the interwar period.

By 1915, Germany was suffering a great many head and neck injuries, and after prototyping, the first Model of 1916 "coal scuttle" steel helmets began to see issue at Verdun. These varied in weight depending on size, and are of martensitic silicone/nickel hardened steel. The liners comprise three leather-padded panels and tend to be loose.

The size 70 that I owned years ago weighed well over two pounds. This type went through several permutations, including the Models of 1917 and 1918, wherein the straps and attachment points changed. The German helmets were air-vented to control the concussion effect and lift via holes channeled through the "horns" on each side. Those fittings were for armor plates and a few other accessories, which seem to have never been completely developed.



Canadian Forces photo archives, 1945

A Canadian soldier aims his Enfield Number 4. The helmet pictured is the classic "Brodie."



This German soldier, shown at the Battle of Stalingrad, is wearing a PPSH helmet.



Often described as “air portable light infantry,” there was nothing light about the U.S. paratrooper’s gear load. This publicity shot details the Normandy-era packet without the Brit-designed leg bag.

The German Stahlhelm was the effective great-grandparent of today’s Kevlar and fiber helmets, offering neck and ear protection that turned out to be a great improvement on its predecessors and contemporaries. The Austro-Hungarian Army adopted a very similar helmet, the Model of 1917, using cloth web strapping and usually liners.

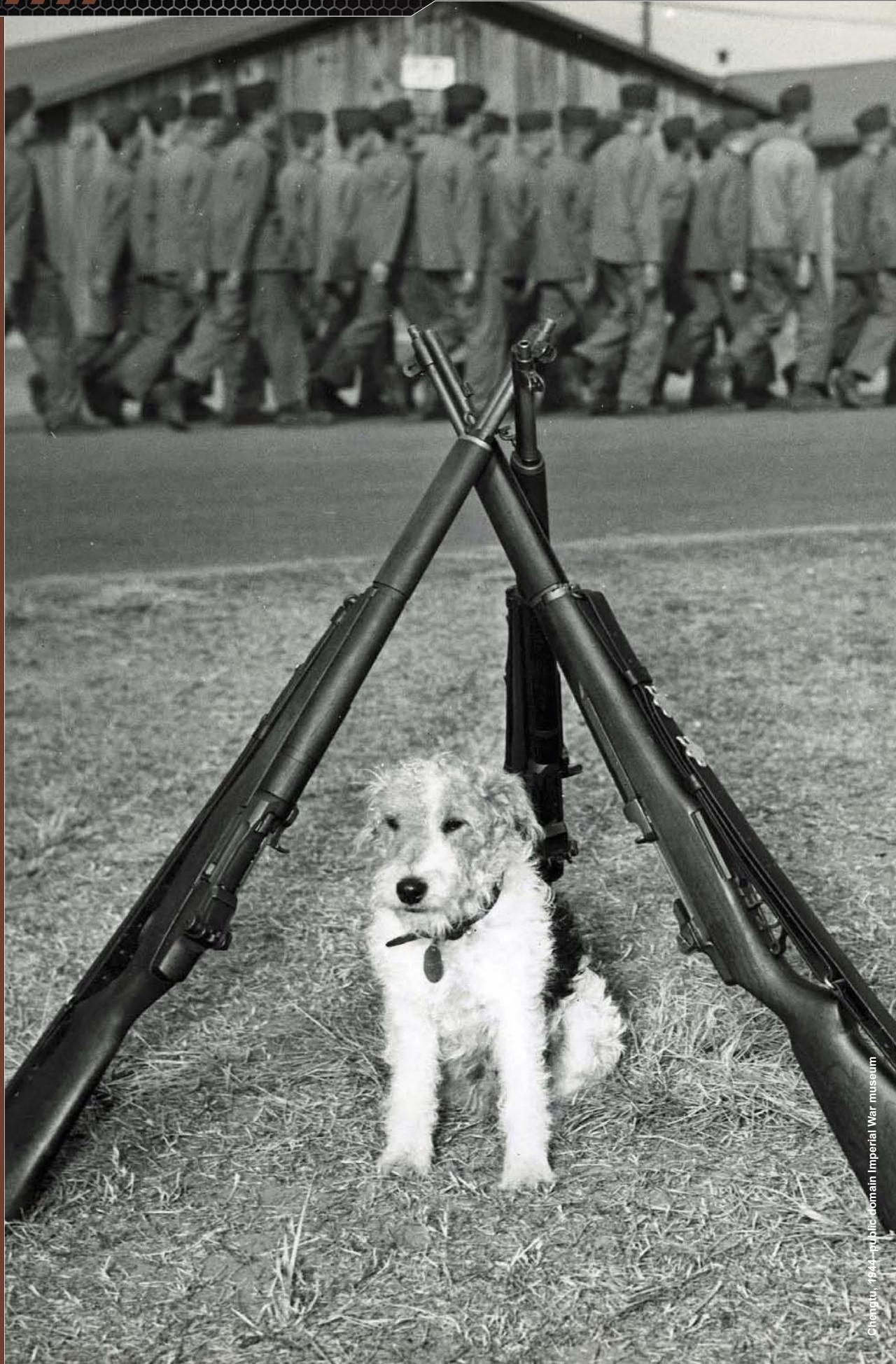
The British helmet, the Mark I, was most commonly called the “Brodie” Model of 1916, after designer John Leopold Brodie. It was the same design as the U.S. Model of 1917, though it had different linings. All but the very first batches were constructed of hardened magnesium steel. Protection from overhead on the Brodie — sometimes called the “shrapnel helmet” — was excellent, but neck and ear coverage was even scarcer than on the Adrian, so a rubber cushion was added in 1917. The helmet was characterized as “too sharp on the edges” and too easily made reflective. Its typical weight was about 1.3 pounds (20.8 ounces). Many even contained asbestos fire retardant in the linings. Liners were eventually improved over time, well into World War II.

The very first steel helmets issued to U.S. military personnel were 400,000 unmodified British production units. This helmet type, with modified liner and fittings, served the United Kingdom throughout World War II. It was also supplemented by the Mark III “turtle helmet,” which entered combat service during the Invasion of France in 1944.

Camouflage painting was common on steel helmets during World War I, and some vintage photos suggest that burlap was periodically used to control glare and break up the helmet lines. Fishnet was also sometimes employed. The cloth camouflage cover came into common use during World War II.

Between the wars, Germany introduced three startling innovations. First, the very rare fiber Model 33, often thought to be a South American fake and sometimes discarded by collectors in the 1960s. Second, the trimmed Model of 1938 Paratrooper helmet, with its four-point strap system and fully padded, ventilated suspension liner. Third, the trimmed down “coal scuttle” Model of 1935, the superior neck-and-ear-protected device upon which almost all current polymer-based combat headgear is at least loosely based.

Modified with pressed-in vents as the Model of 1940, and later with an unrolled sharp edge





The British "Brodie" helmet flat hat was the inspiration for the U.S. Model of 1917. This one is authentic, shown with the standard net cover, with an old S.M.L.E. .303 rifle in the background, much as UK troops might've deployed in early WW2.

as the Model of 1942, these helmets served Germany and many of her allies throughout World War II.

The nearly forgotten Model of 1933 was externally almost identical to the M1917 version with the strap mounting on the liner. However, there has always been a suspicion that troops might have had a morale problem wearing non-metallic headgear in combat. These models seem to have mainly been distributed to officers of rank for ceremonial purposes, and they showed up at parades well into the war.

Finland and Hungary used an identical profile helmet to the German M35/40, and they sometimes three-pin lined actual German specimens. Most of them used a completely different liner setup and bore a hanger setup on the rear apron. These are usually called Model 1940s as well.

The U.S. M1 steel helmet was adopted in 1941, a fiber helmet with a retaining strap using a deep pot and a universal completely independent helmet liner. These never used air vents, and they were normally worn in combat with the straps tucked back or loose to avoid concussion lift. The helmet itself could not be worn without the liner. Over 22 million were made in the United States, and several nations produced close copies. The original inventor of the entirely-separate helmet and liner, and the detailed reasoning behind it, are lost to history, but it made the "bowl" far more versatile for all manner of personal matters.

The M1 was never issued in sizes, since the adjustable webbing, leather band and clips in the liner were moved around to acquire reasonable fit. It was never as secure on the head as European headgear, but the one-size-fits-all idea simplified logistics.

The profile of the M1 soon changed, as did the fittings. The retaining strap was changed from leather to fabric, and before leaving production in the 1960s it was eliminated altogether. The tension of the two units was relied upon to hold the pieces together. Most combinations of helmet and liner weigh 45 to 46 ounces. As a side note, the cloth "cloud pattern" cover developed for the Marine Corps was not exclusive, although it is exceptionally rare to encounter photos of Army personnel using them.

An interesting piece of trivia about the nomenclature itself is that official documents exist titling the helmet with and without the "hyphen," as both "M1" and "M-1," often in the same paperwork.

While steel helmets — simply because many millions were produced — will continue in some sort of military use for probably decades to come, modern armies no longer consider them first-line.

The U.S. "Personnel Armor System for Ground Troops" entered U.S. service in the mid-1980s, shaped so much like the German WWII headgear that they were commonly called the "Fritz" or, in less polite parlance, the "Kraut."

## BODY ARMOR

Body armor — worn extensively along with helmet shields in WWI, but found wanting due to weight — was also developed within the same system, this time seeing much more use. Much of the rest of the developed world has followed suit in headgear designs and body armor.

In the past decade, the PASGT helmet was replaced by the Lightweight Helmet (2009) in the USMC and also by the Modular Integrated Communications Helmet. This in turn led to the Advanced Combat Helmet, which the U.S. Army currently uses. The older, original PASGT "bucket" still sees use, but mainly upon foreign heads.

There is some irony and luck in this tale. Kevlar was itself a developmental accident. A century ago, it must have seemed to high-ranking officers that all of that head protection was somehow unmanly. Collectors, along with many soldiers and Marines, still wonder at the unusual and unknown process that led to the M1 steel pot being two independent entities.

## IRONY OF HELMETS

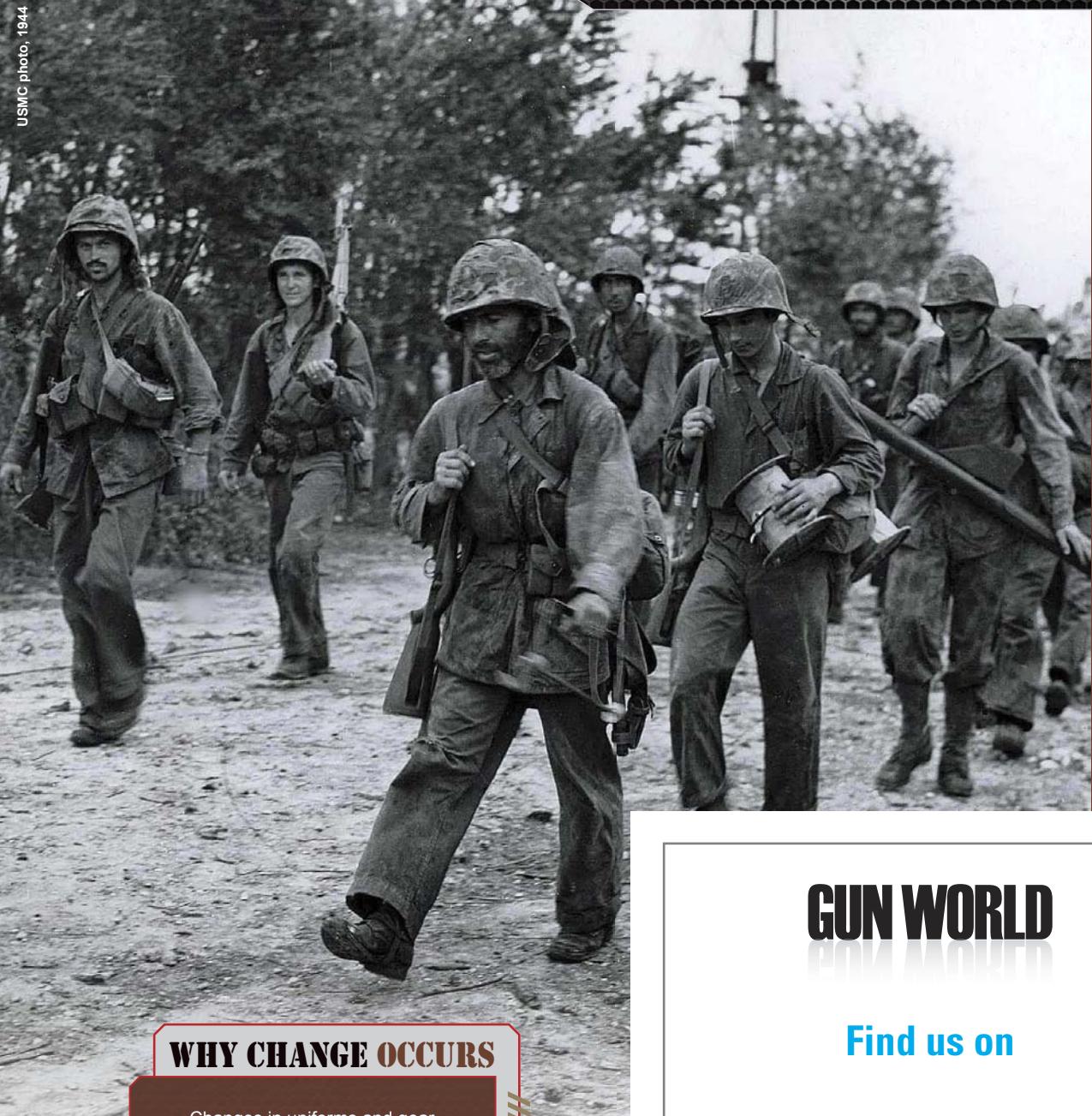
The greatest irony is almost theatrical. A few decades ago, the good guys and the bad guys could be largely sorted out and identified just by the helmets they wore. The universal materials and general overall shape of the composition/Kevlar helmet changed that easy identification. As I said, things change. **IMS**

Marine infantry, pictured coming back from a mission such as laying wire. Note the M1907 leather slings. The absence of any pack or heavy gear on the personnel suggests that this was most likely a brief trip, but the fatigue on their faces suggests that it was an intense one.

This 1943 photo shows code talkers.



**About the author:** Jim Thompson is a columnist for *Firepower* magazine.



## WHY CHANGE OCCURS

Changes in uniforms and gear since World War II largely flow from the following stimuli:

1. New technologies, including details as subtle as Velcro and as profound as ceramics and polymers (plastics) such as Kevlar and synthetic fabrics.
2. An overall acknowledgement in most of the world, especially the western states, that smaller armies and "force multipliers" are the future, and therefore expenditures per soldier need not be as economical as they often have been in the past.
3. While it was never totally ignored, it has become gospel almost everywhere that the physical flexibility of military personnel and their creature comfort *does* matter, and that it yields superior results in given training and discipline.

## GUN WORLD

Find us on

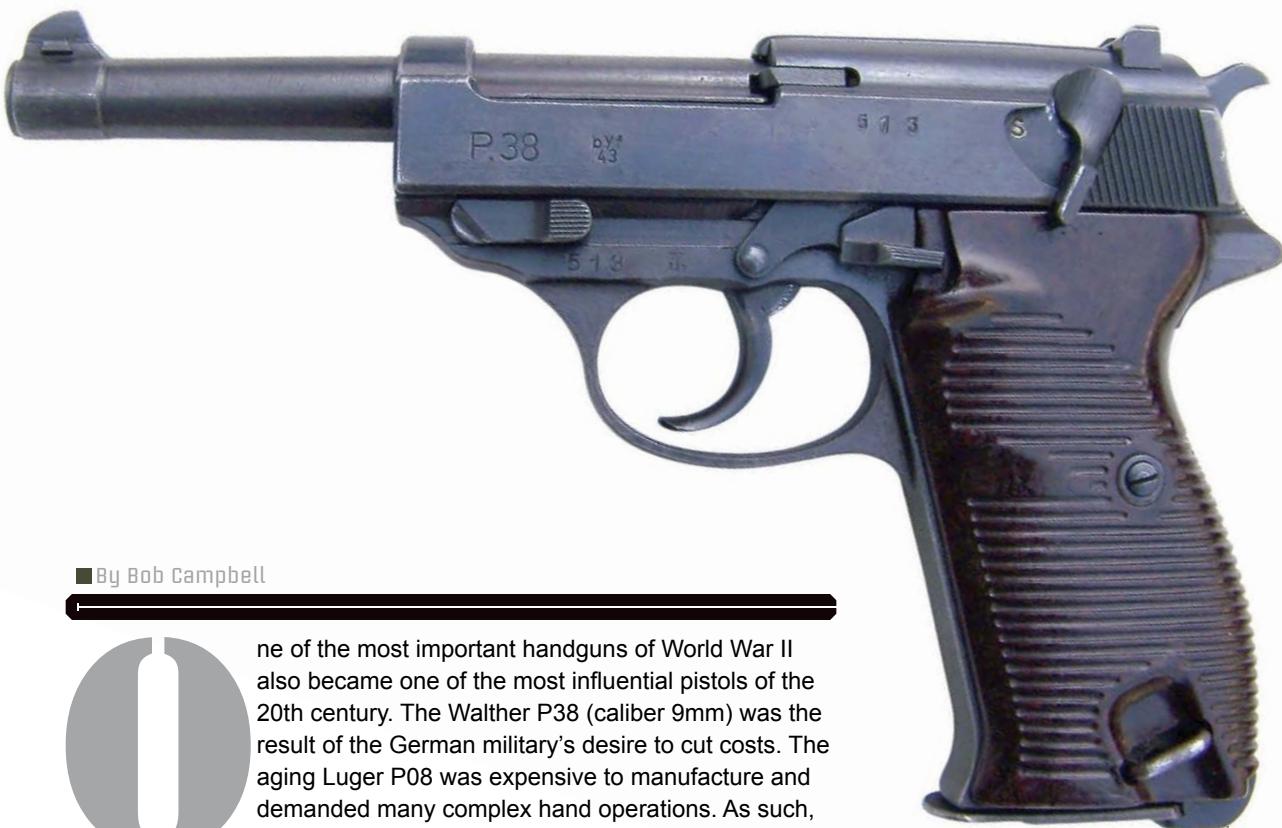


Discover the  
world of firearms at  
your fingertips.

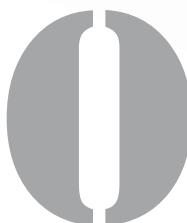
[www.facebook.com/gunworldmagazine](http://www.facebook.com/gunworldmagazine)

# The Walther P38

AN INFLUENTIAL WAR DOG THAT IS AS MUCH A SHOOTER TODAY AS IT WAS OVER A HALF-CENTURY AGO



■ By Bob Campbell



One of the most important handguns of World War II also became one of the most influential pistols of the 20th century. The Walther P38 (caliber 9mm) was the result of the German military's desire to cut costs. The aging Luger P08 was expensive to manufacture and demanded many complex hand operations. As such, its cost was prohibitive for a rapidly expanding military.

Walther listened to the army and gave it what it wanted. While a steel-frame pistol with such precision workmanship would be expensive in today's market, the P38 was hailed as a great cost-saver at the time and had fine performance. Walther had taken to the drawing board and put together a pistol based on sound operating principles.

The double-action lockwork was similar to that of the Walther PP series. The pistol used an external drawbar to operate the trigger. The trigger both cocked and dropped the hammer, so the term "double action" was applied. The pistol featured a slide-mounted combination safety and a decocking lever. When operated, the lever safely lowered the hammer from full cock and also placed the pistol on Safe.

It was as natural for Walther to draw upon the Mauser C96 for design ideas as it would be for an American to draw upon the 1911. The P38 ended up using the Mauser's oscillating wedge for lockup. The army is also reported to have requested a free-floating barrel, and Walther ultimately gave it this design feature.

The P38 is one of the most recognized pistols of World War II. This one was produced in 1943.

Walther was off to a slow start with production of the P38, and it never really kept up with wartime demand. Still, it produced as many as 10,000 pistols a month during the height of production. The Walther P38 was easily the most modern service pistol in use during World War II. Reliable even in terrible conditions, the P38 served from France to Russia, from North Africa to Italy and in every hotspot of the European war.

The double-action lockwork was appreciated by those who felt the single-action design to be outdated. The Walther earned a reputation for accuracy that was superior to most service pistols of the time. The 9mm cartridge does not have the smash

of our own .45 ACP cartridge, but the 9mm shoots flat over a distance and penetrates web gear in a superior fashion. Compared with any pistol contemporary, the P38's takedown lever made field maintenance and cleaning simple.

I have fired many P38 pistols and found them to be generally reliable unless they have been abused. A lack of lubrication or worn springs will cause any handgun to malfunction, no matter how well the pistol is made. With a refreshed spring kit from Wolff GunSprings, the Walther is usually good to go.

The oscillating wedge, however, deserves your attention. If the edges are worn, it should be replaced. The barrel seldom cracks,

but if it does, it is usually a result of battering due to weakened springs. I have seen a few Walther pistols with cracked slides. There are not many handguns that have been well-worn that haven't exhibited a cracked slide, and even the Walther isn't immune to such damage.

I have seen Colt, SIG and Beretta pistols with cracked slides, Glocks blown up and Smith & Wesson 59s battered. The slide illustrated was seen on a pistol that, as far as I know, is still in service with a hobby shooter. It was welded, and then the old warrior went back to shooting. This isn't necessarily a recommended course of action, but it gives an example of the toughness of the design.

Continued Next Page.



World War Supply offers first-class reproduction holsters for the P38, a nice touch for the collection.

The Walther impressed our own military to such an extent that various trials were undertaken after the war to pit the P38 against the Colt 1911A1. The Walther is lighter than the 1911A1, at about 35 ounces. It also kicks less and has a double-action trigger.

Nothing came of the original pistol trials, likely because of the budget restraints and the fact that the Army had around twice as many 1911 pistols as soldiers in the downsized peacetime Army.

Eventually, the Army got its P38 in the form of the modernized Beretta 92. The double-action trigger and external drawbar of the Beretta are pure Walther in design heritage. The open-top slide and oscillating wedge lockup are also very similar to the Walther, although Beretta changed the recoil spring to a single unit with a guide rod instead of the Walther's dual springs. The primary improvement over the P38 is the Beretta 92's high-capacity magazine. However, this requires the use of a shorter safety lever due to the fat magazine in the frame, which causes a hump in the upper frame where it meets the slide. The Walther safety lever is much easier to manipulate quickly, although this may ultimately be an inconsequential point. The Beretta is little more accurate than the Walther, if at all.

# The Walther P38



This shooter is running a magazine of NATO-spec loads through an original P38. Control is superb.



The Walther P1, top, features Wolff Gunsprings recoil springs and has a new locking wedge. It is fieldstripped along with the very similar Beretta 92.

After World War II, the French took over the Walther plant and built the pistol for themselves. The plant was soon closed and production undertaken again by Germany in 1957. The reorganized German army needed a service pistol, and there was nothing better than the Walther P38 available. The postwar P38 and the slightly modified P1 use aluminum frames. These handguns are reliable, well made of good material and lighter than the earlier steel-frame P38. Parts from the original P38 interchange with the P1 for the most part.

Now to the heart of the matter: How does the P38 shoot? In my experience, the only difference in

handling and shooting the modern lightweight-frame pistols is that they kick more due to the lighter frame — the laws of physics are immutable. Still, this isn't that noticeable with standard loads. These observations also apply to the Walther P1 and aluminum-frame P38 pistols.

The P38 is among the most feed-reliable handguns ever produced. The pistol features a straight-line feed. The bullet nose feeds from the magazine almost straight into the chamber, so a wide-mouth hollowpoint feeds just fine. Since German military ammunition was by no means weak-kneed, the P38 is fine for NATO-specification or 9mm +P loads. This is of course assuming

you have a handgun with fresh recoil springs and an uncracked locking wedge. If so, the pistol will effectively feed, chamber, fire and eject with most commercial ammunition.

Occasionally, a Walther will short-cycle with low-power ammunition. A weak handload — say, a 124-grain bullet at 900 fps — will probably not function in the P38. The same may be said for some generic ball ammunition. The Walther functions well with full-power ammunition, with the possible exception of hot loads. The pistol is a joy to handle and fire.

The grip is comfortable and fits most hands well. The single-action break is usually right at 4½ pounds, light enough for excellent shooting.

Two of the author's favorite handguns. The P1 (bottom) is an aluminum-frame 9, and the pistol at top is an aluminum-frame .45 1911 for size comparison.



## PRODUCTION CODES FOR THE P38

The Zero pistols, 01 – 13,000 Eagle-stamped P38s.

The original P38 was marked "480/AC," which was soon changed to:

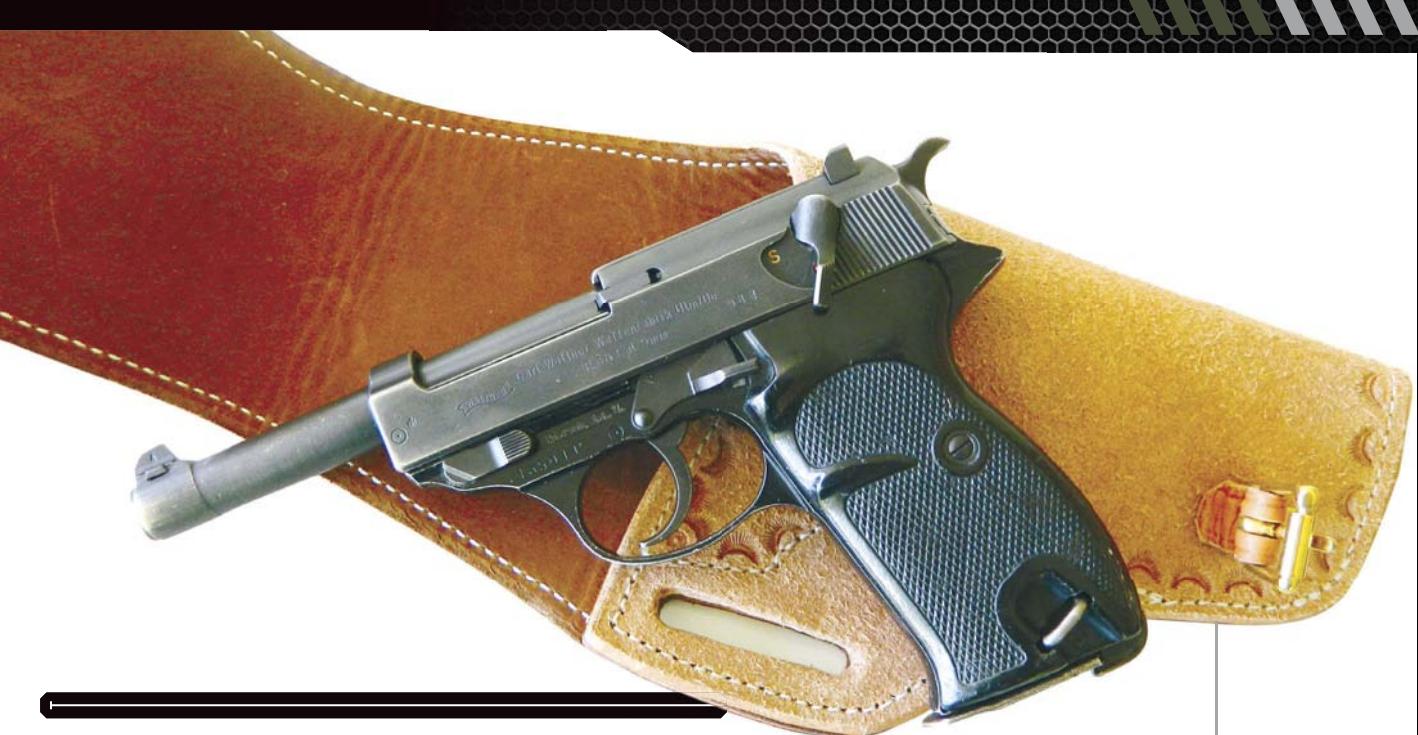
AC 40 for 1940  
AC 41 for 1941  
AC 42 for 1942  
AC 43 for 1943  
AC 44 for 1944  
AC 45 for 1945

Mauser pistols were marked "byf 42," "byf 43," "byf 44" and "byf 45," and the pistols produced for the French (postwar) were marked "svw 45." As well as I could ascertain from my information, these were produced for the French army.

"Spreewerke cyg" indicates one of the various slides produced by FN Belgium and by CZ in Czechoslovakia.

# The Walther P38

P38



For sport shooting, I ignore the double-action feature and simply cock the hammer for the first shot rather than running through the long trigger press. When handling the P38, you will note that the safety, slide lock and takedown lever are each well designed—a shining example of human engineering. The heel-type magazine release isn't as rapid in action as a Browning-type push-button. You are not going to lose the magazine.

In regard to accuracy, the pistol is surprising. I have fired my examples a good bit with the Fiocchi 123-grain Combat loading. This is a truncated cone-nose design that often gives match-grade accuracy in good handguns. The World War II-vintage steel-frame P38 will turn in a 2½-inch 25-yard group with this loading. The 1960s-vintage P1 isn't quite as accurate.

The World War II P38 feeds any hollowpoint you care to stuff into the magazine. As an example, the Fiocchi 115-grain Extrema loading, using the Hornady XTP bullet, feeds perfectly and exhibits a 3¼-inch group at 25 yards. Still, the 124-grain Extrema is at times more accurate.

In a worn or dirty gun, the slightly heavier bullets are often more reliable. However, I would avoid the 147-grain loads for several reasons. These loads tend to transfer more momentum to the locking wedge. This causes early wear and even cracking. Velocity may be too low for good function.

Yes, I fire my P38 pistols. I have owned a number of rather nice examples of the breed, and most have been shooters. The P38 is a great shooter and a good recreational handgun. It is reliable and more accurate than most realize, and it has quite a bit of history behind it. The P38 is among the most important pistols of the previous century.

For field use to carry while hiking, the P1 is a pistol I trust. It is reliable and more than accurate enough to take care of pests and even small game. Fortunately, I do not live in an area with large bears, so that is not a concern. When the Walther is loaded with the Fiocchi Extrema loading, it would be up to the task of handling feral dogs, coyotes or even a member of the protein-fed ex-con criminal class. I just like having something on my hip, and I feel an extra degree of confidence when that something is a Walther. **IMS**

This aluminum-frame P38 is at home in the horsewrightclothing.com field holster, a neat rig.



Watch those locking wedges! The Beretta 92 (top) is shown for reference. The wedge in the P1's lower barrel has been replaced.





# UPGRADES for Your Old Army Mule

076

THREE WAYS TO TEACH AN OLD GUN NEW TRICKS

■ By Abe Elias

I bought my first Army surplus rifle in my teenage years, and I still have it today. Back then, it didn't seem like the supply would ever dry up, and the guns were dirt-cheap. Who would have guessed that my rifle, bought for \$67.00, would later bring as much as \$450.00? There are two types of surplus firearm shooters: Those who prefer to keep everything original, and those who use the surplus rifle as a base on which to build. If you are nostalgic and want to keep your rifle original, read no further. For those of you who want to create a firearm you had a hand in building, we have the three pillars for you

below. Before you begin, try to establish a building ethic. If you come across a rifle that has already been chopped up, that's fine. If you come across a rifle that is in pristine condition or still all original, let it be. There are plenty of guns out there to rebuild that are not what would be considered collector's-class firearms. Now let's look at the three pillars of a rebuild: stock, trigger and optics.





Hogue's stock for the 98 Mauser is perfect if all you want is a lighter, more comfortable stock that simply drops in. You can see the texturing on the forearm and pistol grip.



**ABOVE:** The top is the Rock Solid Industries bent bolt; the bottom is a tear-drop bolt from Blue Grass.



**ABOVE:** The ATI over-the-receiver scope rail provides a cutout so you can use a bent bolt and still clear the rail. If you use a scope with a large ocular bell, you will need to use high enough scope rings to allow the bolt handle to clear the bell in retraction.

## EVERY HOUSE NEEDS A FOUNDATION

The stock is the foundation of your rifle. It allows you to hold and control the rifle. It helps steady it during recoil and assists in dealing with the effects of recoil. If your action is sloppy in the stock, your shooting accuracy will suffer, so it's worthwhile to give your action a new home. Thanks to aftermarket suppliers, there are plenty of products available at many different skill levels. I'll give you some examples of a few that I have personally worked with or used. For the Mosin, there has been a bit of an explosion of available products over the past couple of years. In the last year, I have built a number of rifles using the Mosin as a base. For a hunting rifle, I took the ATI Mosin stock, a simple drop-in, which was a low-skill-level job. The ATI stock is a synthetic Monte Carlo-style stock and comes without pillars — but you could easily add them. If you wanted, you could even fiberglass-bed the ATI stock. Use a product such as Duracoat to easily paint to camouflage it. Another stock I've used is the Archangel Manufacturing AA9130: a synthetic stock in a tactical benchrest pattern. The innovative part of the Archangel is that it gets rid of the internal box magazine and uses a detachable magazine. You can get either a five-round magazine or a 10-round. The stock even comes with an adjustable cheek rest and length of pull. I've also used a Bluegrass SF Tactical

stock. These are made of wood and can come with a number of different options. I decked mine out to the nines and got the forearm rails, monopole and adjustable cheek rest. These stocks also come with pillars and are cut to accept Timney triggers. If you get yours coated at the factory, you might have to put in a little bit of work to get your action to fit. In my case, I had to remove the coating from the inside of the pillars.

Mausers are very collectable and great for DIY builds — I've done a few in the past. I'm using a variety of stocks on a couple of 98 Mausers on which I am currently working. For one of them, I've gone a bit more traditional, using an old Fejan stock I bought at a gun show. For the other, I decided I wanted to house it in a Hogue stock. I buy a lot of Hogue stocks for my other rifles. They come with a fiberglass-reinforced skeleton, and the rubber is molded over the frame. In the case of the centerfire rifles, all of the stocks come with aluminum pillars, or you can alternatively get an aluminum bedding-block. The overmolded rubber is great in all sorts of weather. As a project, these stocks are very low-tech. Just match your model, drop it in and tighten the screws. In the case of the 96 Mauser I'm redoing, I've chosen a Boyd's Stock. Using a Boyd's stock is a bit more involved than some of the others. My 96 stock came unfinished and requires some sanding and a bit of fitting.

If you are going with a Boyd's, it's best to lay in some supplies, all of which you can get from Boyd's or Brownells. You should have some basic finishing skills, and you will also need some tools such as chisels and some scrapers to do the final fitting. All in all, I would say that the skill level for using wood stocks is a bit higher than some other types, but not unmanageable. And if you do manage to stick it out, you can get a beautiful, traditionally finished look.

### IF YOU CAN'T SEE IT, YOU CAN'T HIT IT

There are a number of products out there for mounting scopes to your old military rifle. If you want to improve your accuracy or compensate for failing eyes, adding optics will do the trick. First off, if you are not comfortable drilling or tapping — or don't have any previous experience with these skills — take your project to a gunsmith. If you feel confident drilling and tapping your own receiver, you can find a number of tools to make the job simpler.

Companies such as Williams Gun Sights and Forsters Products have excellent jigs for drilling and tapping. Williams has a scope-mount drill fixture and Forster Products has its Universal Sight Mounting Fixture. Both Williams and Forster provide directions, and you can even get video help online. A good example of how to use the Forster jig appears on American Gunsmithing Institute's DVD "Building the Custom Mauser Rifle" with Gene Shuey.

In some cases, the accessories come with DIY instructions, such as the ones from Rock Solid Industry. Rock Solid provides a number of scope rails for the Mosin, ranging from a receiver-mounted rail to its new M24C rail, which allows you a variety of mountings such as its over-the-receiver and scout mounts. Additionally, ATI has receiver-mounting rails for a number of surplus rifles. Some of the rifles for which ATI has rails are the Enfield, Mauser and Nagant. The skill level for drilling and tapping a receiver yourself is a bit high, but it would be well worth your while to pay a gunsmith to add optics to your rifle.

Left to right: This Boyd's Walnut stock lends a traditional look to the author's Mauser 96. Next is the ATI Monte Carlo stock for the Mosin-Nagant. Last is the Blue Grass Tactical stock with all the bells and whistles.



Changing out the surplus trigger and upgrading to a Timney is easy. On the Mosin, simply remove the screw at "A" and drive the pin out at "B." Install the Timney trigger by replacing the screw and pin. You'll notice a world of difference.



**Above:** Here is the Monopole adjustment and the easily adjustable cheek rest.

**Below:** Archangel's Mosin stock uses a removable magazine system that replaces the rifle's original magazine. You can buy either a five-round magazine or a 10-round. The release is just in front of the finger guard and easy to use.



## THE SWEET PULL OF A TRIGGER

Let's face it: Most surplus rifles have triggers that are about as pleasurable to pull as a tooth at the dentist. A trigger can make a huge difference in both your accuracy and general enjoyment of a firearm. I don't recommend doing your own trigger job. They take time and patience. If done wrong, they can turn your firearm into an accident waiting to happen. If you want a better trigger, take it to a gunsmith to be adjusted.

As an even easier option, you can check out available aftermarket triggers. I know there are quite a number of choices out there, but the one that I have the most experience with is Timney. I put a number of Timney triggers in my firearms — not only my surplus items but my modern ones as well. While there are more triggers out there than just Timneys, I have not tested any, so I wouldn't be able to review them accurately. Boyd's carries a Bold Trigger, and Brownells carries a number of options. I can simply tell you that I have never been disappointed with my Timneys. Replacing a trigger can be a low to medium-level skill project. Usually, on surplus guns it is pretty straightforward. You will need a number of tools, including punches and a screwdriver set.

## BARRELS

I would consider barrels to be the fourth pillar in change. By the time you have changed the barrel, you have pretty much rebuilt the whole rifle. I didn't include rebarreling because it is very expensive and not easily done on your own. The tools for rebarreling are pricey, and they would not pay for themselves if you rebarrel just one rifle. At least if you buy a jig for drilling and tapping a receiver, you're likely to use it again on a number of rifles. Even if you buy a short-chambered barrel, rebarreling requires a number of tools and a fairly high skill level. I'm not saying it's impossible, but I would recommend putting in a lot of research time before you take on such a job. One simple thing you can do to a barrel is recrown it, since a good crown is essential to maintaining accuracy. Check out the state of your crown; if it needs to be redone, you can find all the supplies to do it at Brownells.

Changing your stock and trigger and adding sights can also significantly upgrade your surplus rifle. If you shop around and wait for sales, you won't be spending too much out of pocket. Afterwards, you will end up with something that you made with your own hands. To spread out the costs, you can also do it as a joint project with a friend, with each of you building a rifle. Along the way, you'll gain more firearms knowledge, and knowledge is always a good thing. Check around if you need help to get started; there are plenty of easily available resources. I've bought a number of American Gunsmithing Institute DVDs, which have proven to be very instructional in a number of matters. Take a chance, dive in and go search for that beat-up surplus rifle waiting to be revitalized and put to work again. **IMS**

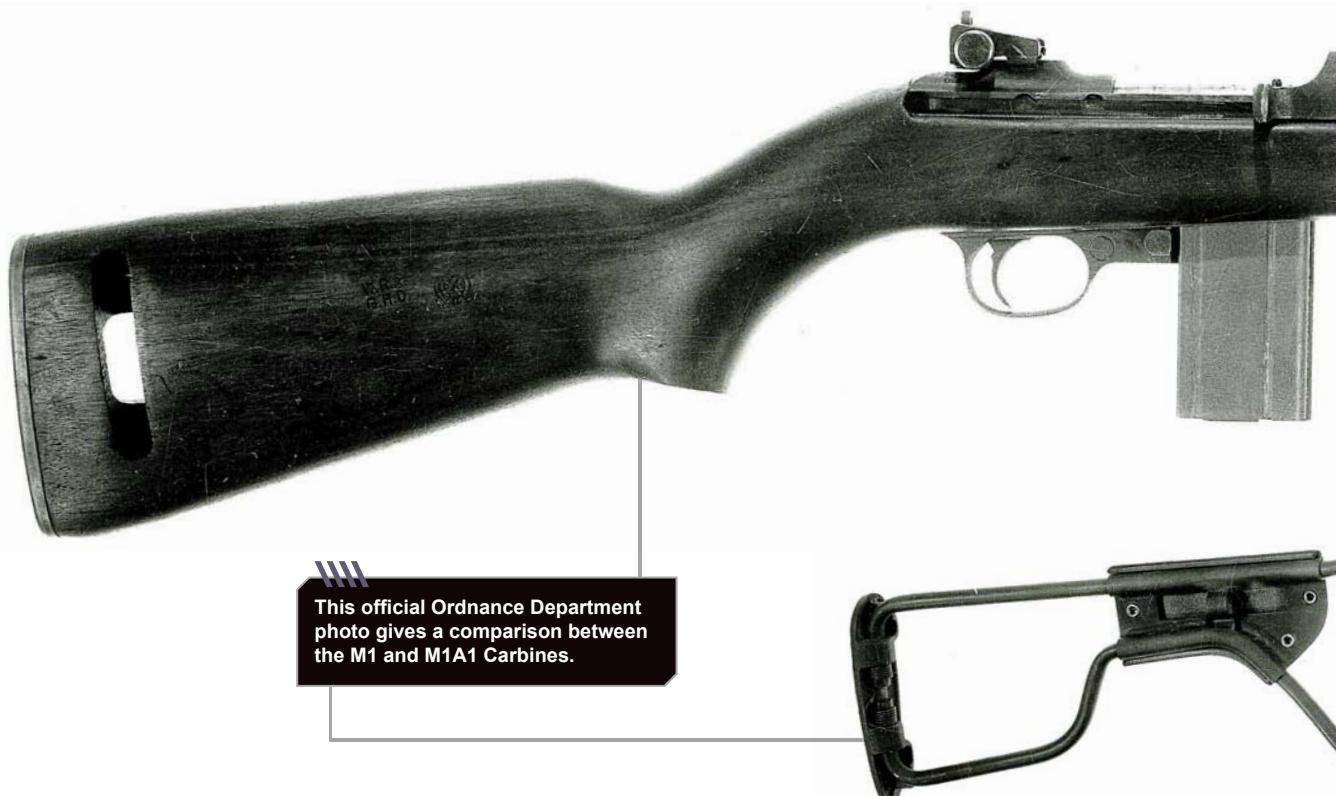


# COMPACT FIREPOWER

Photos courtesy of NARA

080

WHEN JUMPING INTO A HOT ZONE, U.S. AIRBORNE FORCES COULD RELY ON THE M1A1 PARATROOPER CARBINE.



This official Ordnance Department photo gives a comparison between the M1 and M1A1 Carbines.

**D**uring the early days of the U.S. Airborne Forces in World War II, various weapons were tried out. When the Parachute Test Platoon was first formed, .45-caliber 1911 autos and 1917 revolvers were used. As with German paratroops, the Air Force's heavier weapons were intended for dropping into a case or a canister. However, the M1 Garand and the Thompson submachine gun soon became the principal weapons of the paratroopers. Both were effective, but they were too long and heavy to be convenient when jumping. Still, there was a solution.

#### COMPACT PLUS FIREPOWER

The introduction of the M1 Carbine, with its 15-round magazine, offered a more compact weapon that gave the paratroopers

more firepower. However, airborne forces wanted a carbine that could be even more compact for jumping, yet remain ready for quick deployment. To fulfill this request, in the spring of 1942 Col. Rene Studler, the Ordnance Department's Chief of Research and Development, ordered development of a folding stock to make the M1 Carbine even more handy for paratroopers.

To create the design, Springfield Armory, along with Inland and Winchester (the two largest producers of M1 Carbines during WWII), went to work. In March of 1942, they submitted a design. The brainchild of an engineer for the Inland Division of General Motors, the design allowed the trigger to be operable with the carbine's stock both folded and unfolded. With this innovation, a paratrooper could jump with the stock folded, yet still be able to fire his weapon

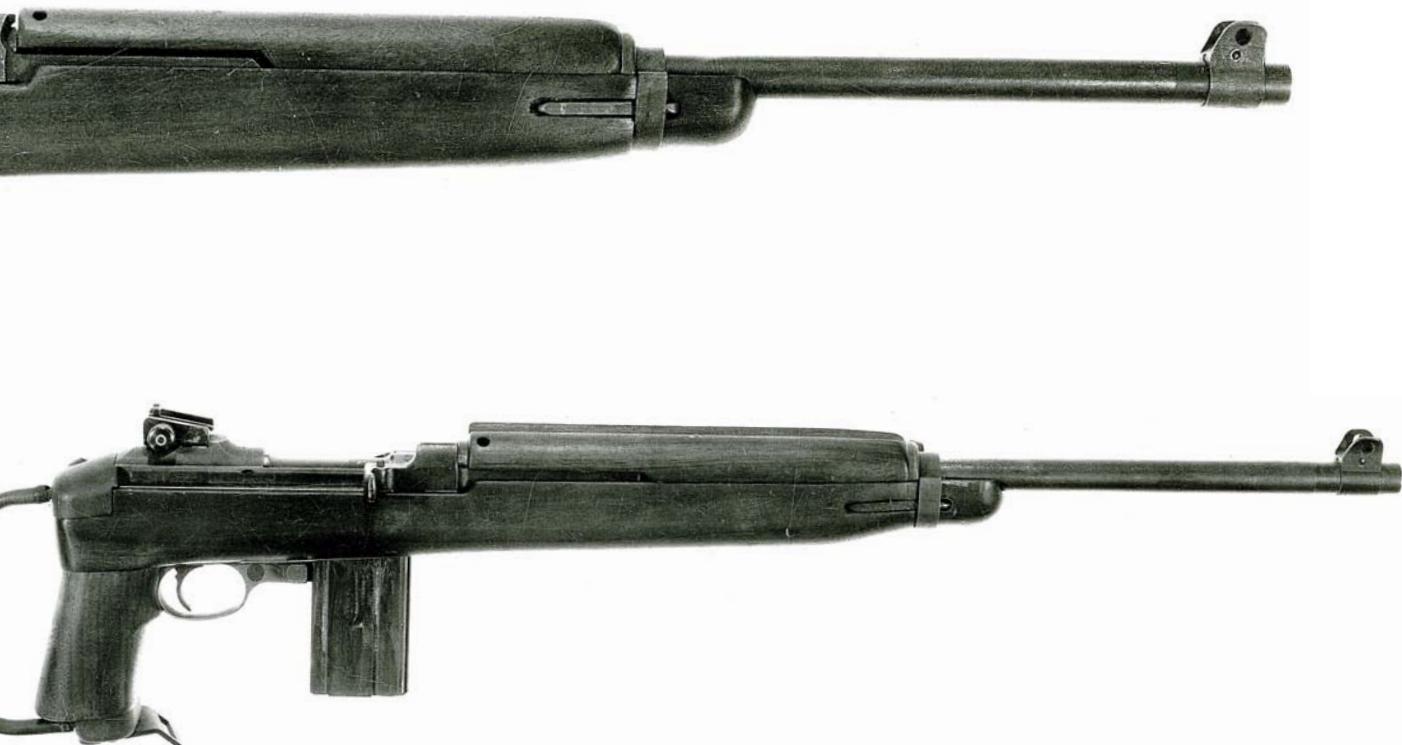
if he should end up jumping into a particularly hot landing zone.

The design was quickly approved on May 12, 1942, as the M1A1. All other carbine parts remained standard, with only the stock on the M1A1 being different.

A popular feature of the M1A1 was the pistol grip, which allowed the carbine to be handled more readily. Although there were 12 different M1 Carbine manufacturers, all M1A1 Paratroop Carbines were produced by Inland.

Often, a carbine manufactured by another company can be found in an M1A1 stock, but this just means that it is not a correct World War II example. In some cases, these were actually military carbines from other manufacturers that had an M1A1 stock added during refurbishing after the war. In other cases, they were just assembled to cash in on the premium that collectors will pay for an M1A1.

Continued Next Page.



One noticeable difference on the M1A1 is the method of retaining the sling. On the standard M1 carbine, the oiler acts as the rear sling retention point. This is not the case on the M1A1, which has a rear sling mounting point on the pistol grip. On the M1A1, the oiler is mounted to a spring retention device on the stock.

As the M1A1 reached airborne units, fewer M1 Garands or Thompson SMGs were issued. Because of the need for some troops to retain the ability to engage

at longer ranges, some paratroopers continued to carry M1 rifles or M1903A4 sniping rifles.

### FIRST COMBAT

The M1A1 first saw combat in the hands of 82nd Airborne Division paratroopers during Operation Husky, the July 1943 jump over Sicily. Although paratroopers liked the fact that they could tuck the M1A1 under their reserve chute to have it readily available, the downside

Continued Next Page.

082

STYLING: MILITARY DESIGN

A paratrooper firing his M1A1 Carbine.



**COMPACT  
FIREPOWER**

Photo courtesy of NARA



A close look at the barrel of an early M1A1 Carbine. Note that there is no bayonet lug on most World War II M1A1 Carbines.

INSIDE MILITARY SURPLUS

083

These 17th Airborne paratroopers prepare for Operation Varsity, the jump across the Rhine. Note that the Tech Sergeant at the left wears the M1A1 Carbine jump holster.

was that the jerk from the main chute opening would often cause the pistol grip to hit them in the chin.

To make jumping with the M1A1 more comfortable, a "holster" was developed to hold the M1A1 with its stock folded and a 15-round magazine in place. It was designated as the "holster assembly, parachutists for the M1A1 carbine." With the flap closed, the overall length of the holster was only 27½ inches. Constructed of padded canvas with a flap closed by two snaps, it had a 6-inch belt loop on the back and a 24-inch leg strap at the bottom. It allowed the M1A1 to be carried more comfortably, yet still be accessible immediately upon landing. Photos of paratroopers on jumps later in the war such as Market Garden or Varsity show the holster in wide usage. It does not appear to have made it to paratroopers of the 11th Airborne Division in the Pacific in any significant number, if at all.

Most M1A1 carbines that were used in combat during World War II were of the early type, which had a fixed flip-up rear sight, a push-button safety and no bayonet lug. The push-button safety was especially unpopular with many paratroopers, as it was relatively close to the magazine-release button. As a result, they would sometimes hit the release button by mistake and drop their magazine to the ground. This is a problematic function to deal with in the middle of a firefight.

Late-war-production inland carbines, including M1A1s, incorporated an adjustable rear sight that allowed

effective engagement at longer ranges, a lever safety that was less likely to be confused with the magazine release and a bayonet lug. Those M1 and M1A1 carbines that lacked a bayonet lug were issued with the M3 Trench/fighting knife, which was popular with the paratroopers. Later, when bayonet lugs were added to M1 and M1A1 carbines, the M4 bayonet for them was based on the M3 fighting knife.

**"With this innovation, a paratrooper could jump with the stock folded, yet still be able to fire his weapon if he ended up jumping into a hot landing zone."**

### STOPPING POWER

The issue of stopping power has often been raised when discussing the M1 carbine. This is partially due to a misunderstanding of the mission of the M1 or M1A1 carbine — especially the latter.

The M1 carbine was intended to give support troops or others who would formerly have been armed with a pistol a weapon that would offer greater range and knockdown power. However, it was often

compared to the M1 rifle, which was a full-size battle rifle firing the .30-06 cartridge as opposed to the .30 Carbine round. Yes, the M1 rifle was a more effective man-stopper and man-killer than the M1 carbine, but it was also bigger and heavier and fired from eight-round clips.

The M1 carbine, and especially the M1A1, was far lighter and more compact, and it was fired from detachable, 15-round box magazines. Airborne troops were intended to function as raiders dropped to seize key objectives quickly. Normally, they were expected to fight at relatively close range until they were relieved.



**This is a good view of the M1A1 folding stock showing how the oiler was clipped to the reverse of the cheek piece. Note also the sling attachment point on the pistol grip.**

Continued Next Page.



A paratrooper with his M1A1 Carbine tucked behind his reserve parachute. Some paratroopers disliked this method, as they found that the pistol grip would hit them in the face when their main chute opened.

COMPACT  
FIREPOWER

Firepower was important, and the M1A1 offered that. Still, it was important that M1 rifles continued to be carried by some of the paratroopers in order to keep the enemy at a distance.

Although the M1A1 was used primarily by U.S. paratroopers during World War II, 2,104 were supplied to British allies. These may have been for use by units such as the Special Operations Executive or the Special Air Service. Sources do not specify who received the M1A1 lend-lease carbines. After World War II, a substantial number of M1A1 carbines were sent to French paratroopers, who used them extensively in Indochina.

#### COLLECTORS

M1A1 paratroop carbines have always been extremely popular with collectors. The airing of the HBO miniseries "Band of Brothers" made the M1A1 an even more widely

sought-after collectible. Prices for an authentic World War II M1A1 with original features in nice condition have soared to upward of \$3,000. Those original Inland M1A1 carbines that were refurbished and upgraded post-World

War II — with the adjustable rear sight, lever safety, bayonet lug and other modifications — are still desirable and will probably bring \$1,500 or more.

I consider either of these examples a valid GI M1A1 carbine, though I suppose it could be said that the carbine with early features is more "valid." Anyone desiring to own

an M1A1 carbine must be very knowledgeable in order to avoid getting stuck with a reproduction. There are features that identify an original stock, and it is important to be familiar with them. Many reproduction stocks have been made, and original World War II Inland Carbines have been put into them.

Go ahead. Delve into history a little. **IMS**

**About the author:** Leroy Thompson has trained and advised military and police special operations units around the world, and he has had more than 45 books published.

**A view of the M1A1's pistol grip and magazine. Note the push-button safety just in front of the trigger guard and the push-button magazine release just in front of that. Paratroopers found that in combat, it was possible to inadvertently hit the magazine release, thinking it was the safety.**



# DOUBLE DOWN & SAVE BIG



**ONLY  
\$36.95**

Combine 1 Yr subscription to **Bow & Arrow Hunting** with 1 Yr subscription to **American Survival Guide** and save **67% off** the cover price

## TO SUBSCRIBE

0 9 C [www.engagedmediamags.com/combo\\_bahasg](http://www.engagedmediamags.com/combo_bahasg)  
3 BC 877 47B  
CC 7 B67B8 B 47 3 6 3 C C BA3 7 C 8 B 3C C  
- 75 70C1 76 3 00 0 5 4 F 2 367 A 3 2, # #

**YES!** sign me up for a subscription to Bow & Arrow Hunting and American Survival Guide

That is a total of 15 issues for a total savings of \$73.90 off the cover price.

**Method of Payment**  **Check enclosed**  **Credit Card**  **Money Order**

Payment through credit card  Visa  MC  AMEX  Discover Name on credit card

**Credit card number**

**Subscriber name** First \_\_\_\_\_ MI \_\_\_\_\_ Last \_\_\_\_\_

**Address** \_\_\_\_\_

**City** \_\_\_\_\_ **State** \_\_\_\_\_

---

Page 1 of 1

**Enter Promo Code**

---

ENTER YOUR LOGO

**Signature** \_\_\_\_\_ **Date** \_\_\_\_\_ / \_\_\_\_\_ / **A743M4VI**

## Enter Promo Code

**A743M4V1**

For a full listing of our titles, visit [www.engagedmediamags.com](http://www.engagedmediamags.com) today!

Allow 6 to 8 weeks for delivery of first issue. Outside US add \$35 per year for postage. Pay in US funds only.

# 3 Generations



A LOOK AT THREE SOLID GENERATIONS OF U.S. MILITARY SMALL ARMS

■ By Paul Hantke

**W**hile there always seem to be rumors of new personal weapons systems for the U.S. Armed Forces, it typically turns out to be a lot of fluff and "much ado about nothing." That's easy to see when you consider that going back just three generations of issued firearms will take you to 1935 for rifles and 1873 for handguns.

Not exactly a staggering amount of turnover.

# HANDGUNS COLT MODEL P

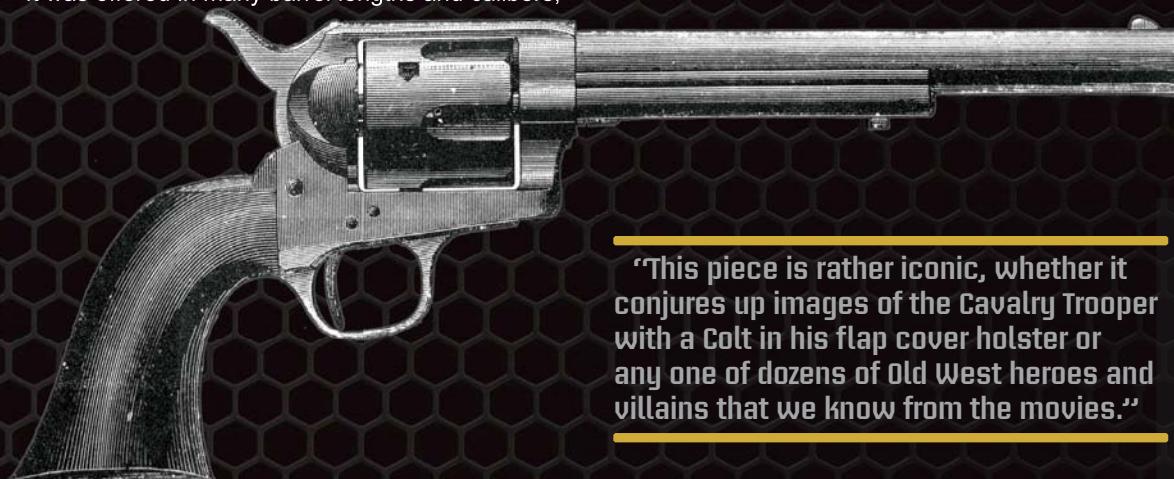
On the handgun side we find ourselves dealing with the classic Colt Model P, also known as the Single Action Army, which was introduced in 1873. This piece is rather iconic, whether it conjures up images of the Cavalry Trooper with a Colt in his flap cover holster or any one of dozens of Old West heroes and villains that we all know from the movies.

Almost any red-blooded American male can identify the Colt six-shooter, and many will be under the impression that the handgun was the only option available to shooters at the time. In fact, the West was awash with other choices, both domestic and foreign, when the Model P came on the market.

It was offered in many barrel lengths and calibers,

safely while loaded with five cartridges and the hammer down on an empty chamber. This is because the fixed firing pin on the hammer is left resting on the primer of a loaded round when it is lowered, and any sort of blow to the back of the hammer will fire the cartridge.

The old Colt served well for decades, and was later recalled for duty in the Philippines early in the 1900s because the newly adapted .38 caliber handguns proved to be poor man-stoppers in the face of the drug-fueled, fanatical and suicidal tribesmen in that conflict. That experience, along with the transition from horses to motor vehicles for the more mobile troops emphasized the need for a new service handgun. This



but the military issue Colt wore a 7.5-inch barrel and weighed in at about 38 ounces. The military .45 load was a 250-grain lead slug propelled at about 750-800 fps, while the civilian ammunition was a bit stouter. This was an economic measure based on the powder savings achieved through loading hundreds of thousands or even millions of rounds at a time, and it also tamed the recoil somewhat while mediating some of the stresses on the heavily-used gun.

For infantry ground troops, the Colt was a secondary weapon to their primary rifle or carbine, but mounted troops found that the easy one-handed handling and multiple shots available provided the edge they needed while fighting on horseback. In addition, the Colt was a simple and sturdy product that was easy to troubleshoot and repair when it did break.

One of the few issues with the Colt is that while it was chambered for six rounds, it could only be carried

***"This piece is rather iconic, whether it conjures up images of the Cavalry Trooper with a Colt in his flap cover holster or any one of dozens of Old West heroes and villains that we know from the movies."***

one had to maintain the man-stopping power of the old Model P, while offering it in a smaller package that provided a faster rate of firepower and quicker reloads than the single action had offered.

Many nations had been experimenting with self-loading semi-automatic handguns around the turn of the century. While there were many attempts, the success of Germany's Luger P08 put an exclamation mark on the mission statement. The U.S. was in the middle of all of this and had been testing semi-auto handguns for some time — including .45 caliber versions of the Luger, which are worth about a million bucks each today. Colt had submitted their 1905 model, but it was just not robust enough for general issue and heavy use by lunk-headed troops. Then, John Browning came to the rescue with his latest development, the Colt 1911 pistol chambered in .45 ACP.

## HANDGUNS

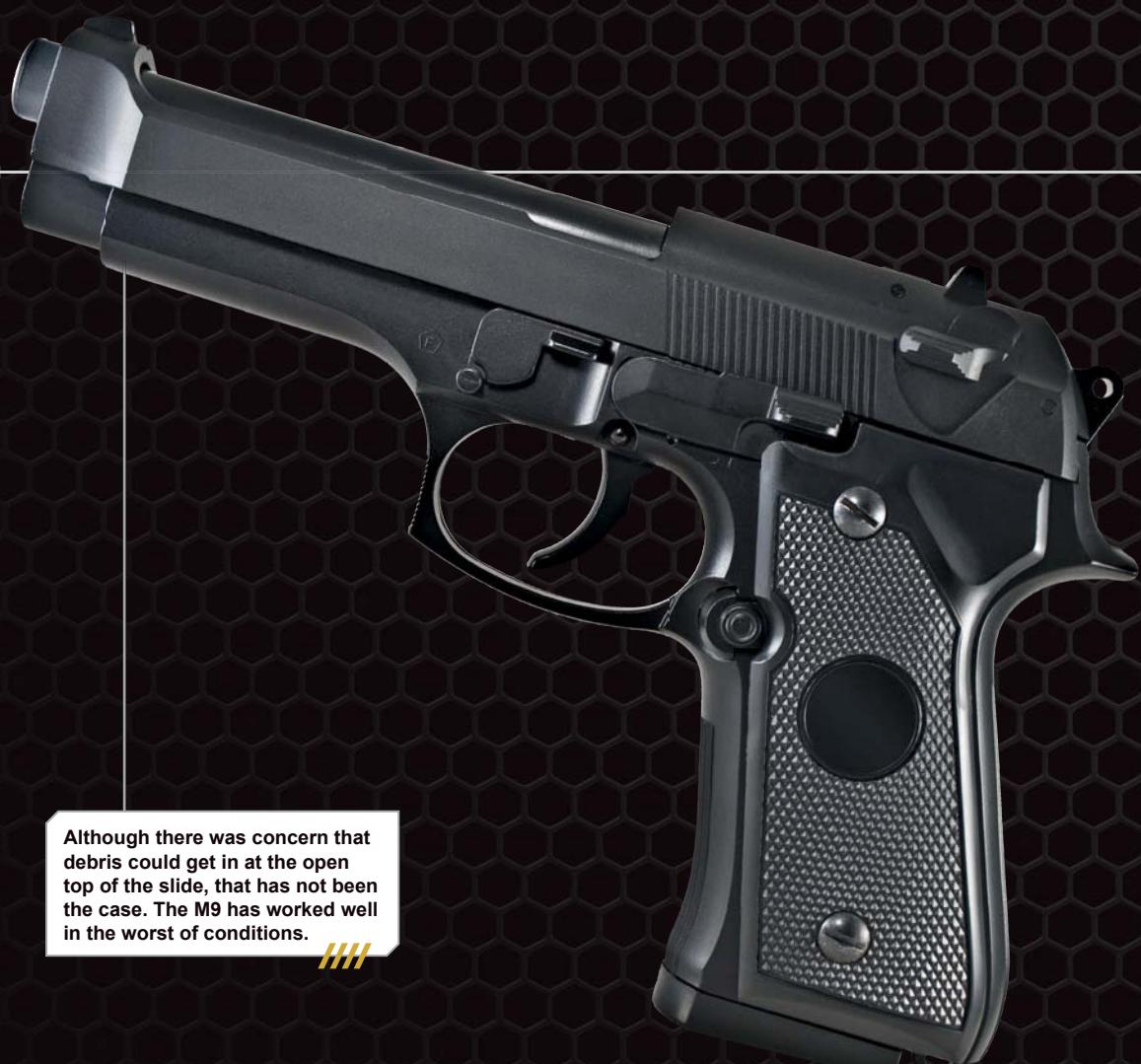
### 1911

The new 1911 was built like a tank. It was accurate and reliable, quick to reload and suitable for one-handed use. This requirement was a hold-over from when a trooper needed one hand to hold and control the horse's reins, but as the military transitioned to motor vehicles, it seemed like the feature would still prove invaluable. However, time has shown that drivers need to drive — and that takes two hands, especially with manual transmissions.

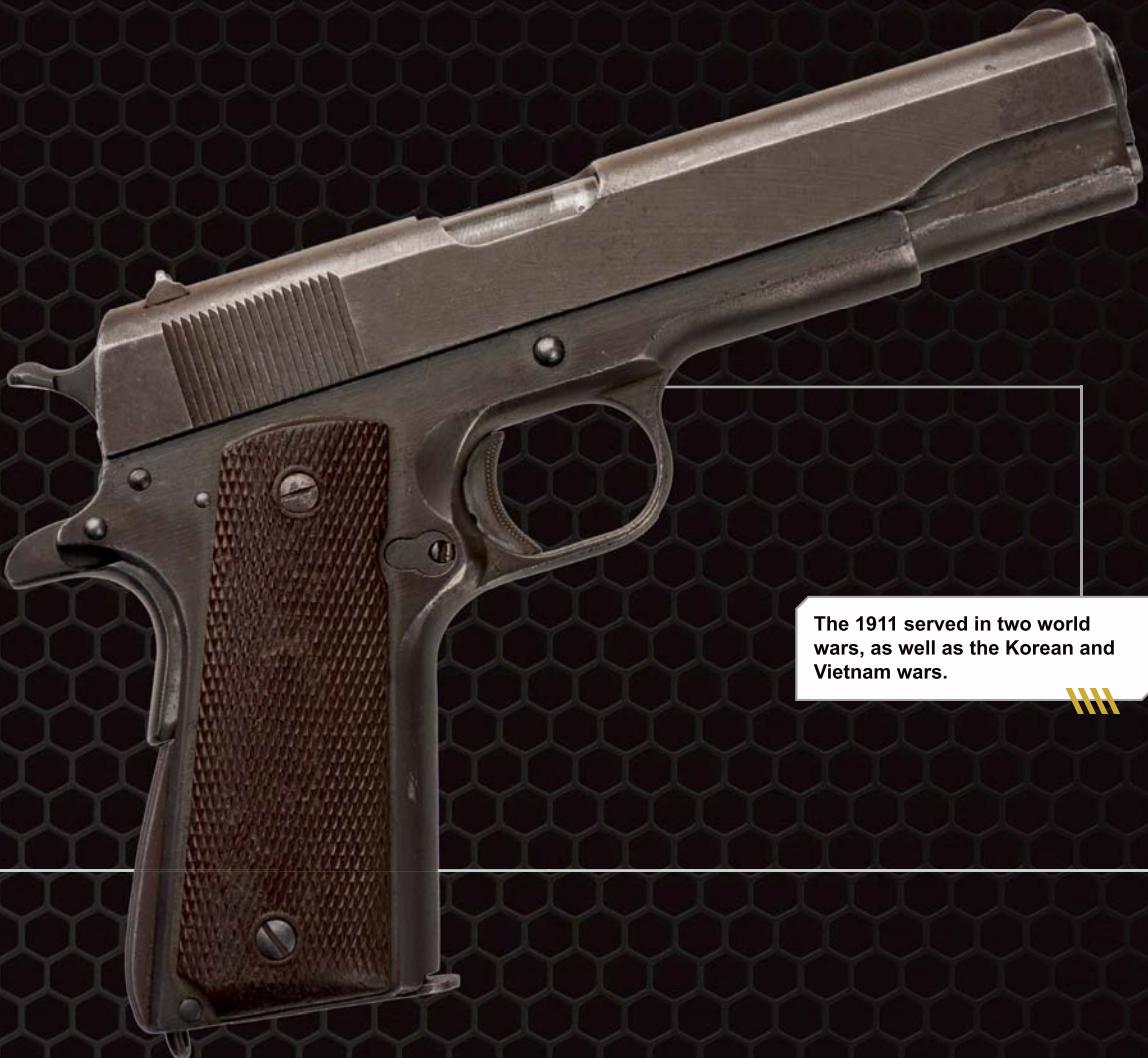
The new .45 ACP round virtually duplicated the performance of the old Colt .45 ammo, and it was dispensed from an interchangeable 7-round stick magazine. Originally, .45 ACP ammo had a 200-grain bullet moving at about 900 fps, but the military

requested and received a load featuring a 230-grain slug traveling around 750 fps. There is a plethora of different loads available for the .45 ACP today, but the original 230-grain FMJ instilled so much trust in those who used it that it eventually inspired the phrase, "They all fall to ball!"

Minor changes in the sights, trigger, back strap and some other items resulted in the more current 1911A1 model, and the two versions served faithfully through two world wars, as well as in Korea and Vietnam. While it was replaced for general issue by the Beretta M9 (Model 92 FS) in the mid-1980s, the old Colt is still carried by various Special Forces and other elite U.S. military units.



Although there was concern that debris could get in at the open top of the slide, that has not been the case. The M9 has worked well in the worst of conditions.



The 1911 served in two world wars, as well as the Korean and Vietnam wars.

## HANDGUNS BERETTA M9

The Beretta M9 was initially an attempt to increase firepower to a 15-round magazine, lighten recoil and bring the U.S. into line with the NATO guidelines that ask for a 9mm handgun. Testers were looking for a pistol with first round double-action that could be carried safely hammer-down with a round in the chamber. This project was also supposed to reduce the size and weight of the sidearm, but that concept went right out the window since the Beretta is a big gun. Dimensionally similar to the Colt 1911A1, it also nearly matches the weight of the Colt at 35 ounces. The grip is also much larger to house the double-stacked magazine required to increase the cartridge capacity. The Beretta actually came in second next to

the SIG P226 after all the testing was done. The final hurdle was price, and that's why the slightly-cheaper Beretta was selected to replace the 1911.

The main concern testers had with the Beretta was the open top of the slide that will allow dirt and debris to get in and clog the gun, rendering it inoperable. Many years of use in firearm-challenging environments have shown that this is not the problem it appears to be, and the Beretta sloughs off dirt, mud and sand to continue firing under the worst of conditions. Other than size and weight, the Beretta meets all of the qualifiers for a 1911 replacement, and the government has just contracted for two more big batches of the pistol to arm our troops.



## RIFLES M1 GARAND



Getting back to our three generations theme, we start out with the M1 Garand. The Garand was chambered for the .30-06 cartridge, but it was otherwise way ahead of its time as an issue battle rifle. The Garand represents one of the few times the U.S. military beat everyone else to the punch: it introduced a semi-auto rifle with an eight-shot capacity while the rest of the world plodded along with five-shot bolt actions.

The Garand was adopted in the mid-1930s, but rifle production was so slow that many units were still using the old Springfield at the beginning of WWII. Production was quickly ramped up after the start of the

hostilities, and soon everyone was carrying a Garand, which is arguably the gun that eventually won the war for the U.S. and our allies.

Weighing in at around 9.5 pounds, the Garand was fed that .30-06 cartridge by an 8-shot clip that was inserted through the top of the open action. This feeding system was criticized because you could not “top off” the rifle after firing only a few rounds, making it necessary to empty the rifle so that the clip would eject before reloading. The second issue was that the rifle emitted a distinctive “ping” when the clip did pop out, alerting the enemy that your rifle was empty.

I've been in dozens of firefights, and I can't think of

092



## RIFLES 1903 SPRINGFIELD

Switching over to long guns, I'm going to cheat a little and look back four generations to include an extra rifle. That would be the 1903 Springfield, the gun that brought the U.S. into the 20th century.

America was so impressed with the Mauser K98 rifle and its ammunition that we set about copying it with

the Springfield and its fodder. The rifle replaced the old Krag bolt action with a new action, new feed system and new ammunition. If you doubt that we copied the Mauser, you are probably not aware that this issue was settled in court and that the U.S. paid patent infringement royalties to Germany right up until WWI.



one instance where I could have heard the sound of a clip ejecting or hitting the ground. However, there must be some truth to this because there are many stories of U.S. ground troops carrying a few empty clips and using them to fool the enemy into attacking when they thought someone's rifle was out of ammo.

The great Garand was replaced by the M14 after NATO adopted the 7.62x51mm (.308 Winchester) round in the 1950s. The cartridge itself duplicated the performance of the .30-06 from a slightly smaller case thanks to new powders, and the M14 is essentially just a magazine-fed Garand. The action, sights,

trigger group and gas system are all pure Garand, and the manual-at-arms functions the same. The only exception is that you change out the 20-round box magazine as opposed to inserting another 8-round clip.

Besides the advantage of a slightly lighter cartridge that increased the round count of an individual's ammo load capacity, the M14 was also a selective fire rifle offering full-auto operation. This sounds like a big advantage over the Garand until you try it, and then you realize that it takes two men and a boy to hold the M14 down when fired on full-auto.

093

 The 1903 Springfield brought the U.S. into the 20th Century.

We didn't get it right the first time with the ammunition, however, and the original load used a heavy, round-nose bullet. Corrections were made after three years, and a new cartridge was introduced that used a pointed, "spitzer" bullet like the German ammunition in 7mm and 8mm.

This was the .30-06, whose name designates its bullet diameter and year of introduction. It did the job that the military needed, not only near its initial issue point, but all the way through the mid-century mark. It was also a strong favorite in hunting game fields across the globe.



## RIFLES COLT M16

The success of the Russian AK47 and its intermediate 7.62x39mm round caused the West to re-think their strategies, and the Colt M16 firing the 5.56x45mm round was born in the 1950s. Short, light, and easy to control on full-auto, the M16 seemed like a good answer to the problems of today's battlefields, but reliability issues plagued the gun in its first years of combat. This was eventually determined to be due to a combination of a change in the gunpowder used and less than meticulous cleaning and maintenance of the rifle by the troops.

094

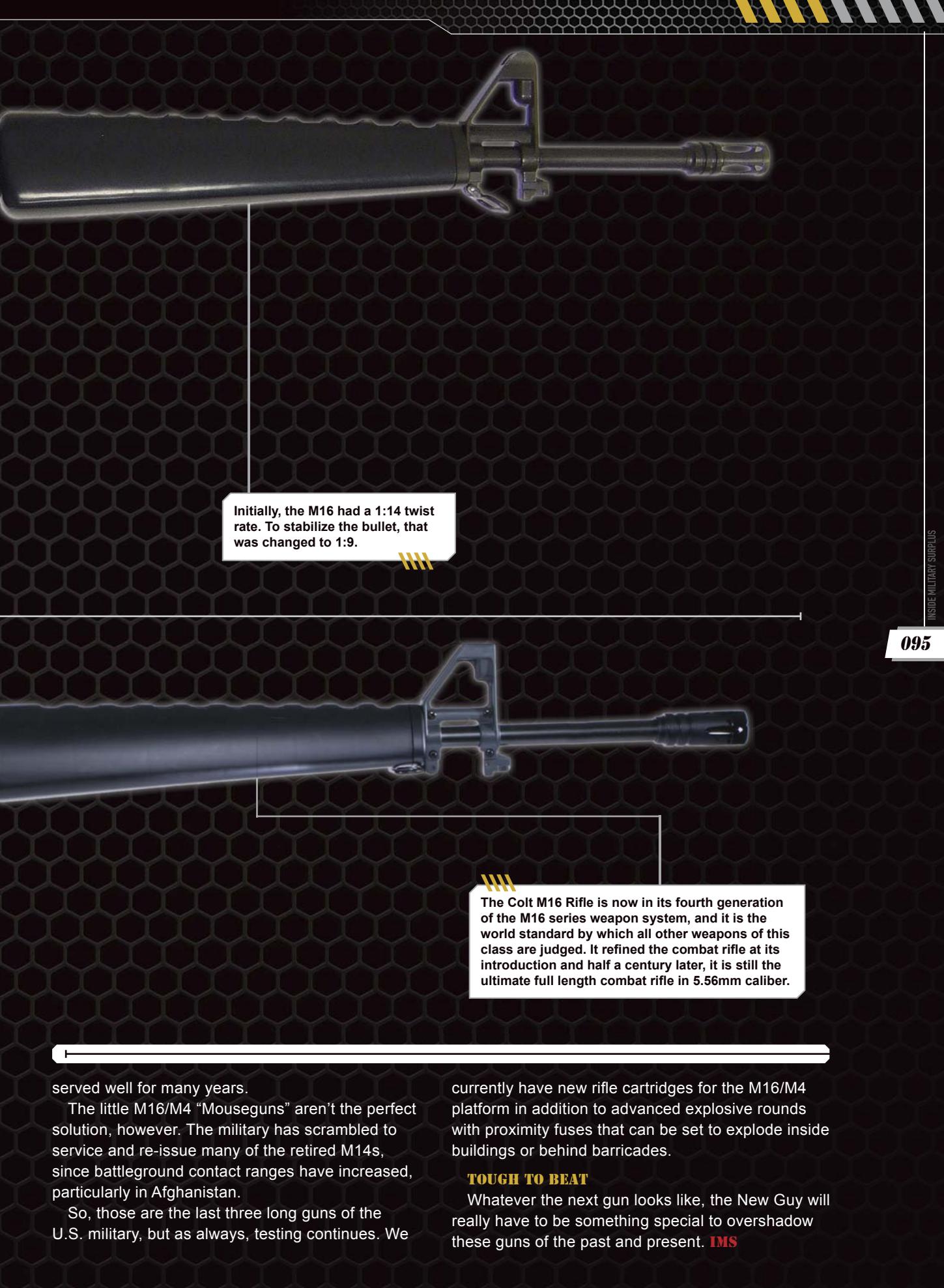


## RIFLES M16

Once these problems were solved, the focus was switched to the somewhat mediocre accuracy of the M16. That was determined to be due primarily to the 1-in-14 barrel twist rate. It was soon changed to a 1-in-9 twist that helped better stabilize the 55-grain bullet. Unfortunately, while the newly stabilized bullet was more accurate, it no longer upset upon impact, which sacrificed the tremendous shocking power of the earlier configuration. In short, the bullet was

now punching neat holes instead of tumbling when it hit, which is what had given the little cartridge its outstanding performance in the first place.

From there, the U.S. experimented with different bullet weights and constructions while also evolving the rifle itself. Eventually it arrived at the M4 version of today and the 62-grain "green tip" ammo that it uses. The M4 is a more compact version of the M16, often fitted with a collapsible stock, and it has now



Initially, the M16 had a 1:14 twist rate. To stabilize the bullet, that was changed to 1:9.

The Colt M16 Rifle is now in its fourth generation of the M16 series weapon system, and it is the world standard by which all other weapons of this class are judged. It refined the combat rifle at its introduction and half a century later, it is still the ultimate full length combat rifle in 5.56mm caliber.

served well for many years.

The little M16/M4 "Mouseguns" aren't the perfect solution, however. The military has scrambled to service and re-issue many of the retired M14s, since battleground contact ranges have increased, particularly in Afghanistan.

So, those are the last three long guns of the U.S. military, but as always, testing continues. We

currently have new rifle cartridges for the M16/M4 platform in addition to advanced explosive rounds with proximity fuses that can be set to explode inside buildings or behind barricades.

#### TOUGH TO BEAT

Whatever the next gun looks like, the New Guy will really have to be something special to overshadow these guns of the past and present. **IMS**

# DREAM



096

## SURPLUS COLLECTIBLES THAT SHOOT FOR THE STARS

■ By Abe Elias - Photos Courtesy of Rock Island Auction Company

**N**ormally, when you say "military surplus," people's minds turn to inexpensive firearms and low-cost ammo.

I remember when I first started looking into military surplus: it was right after I read an article about the Swedish Mauser. The writer talked about how he lived in Alaska and used the rifle as his everyday rifle. The idea was to carry it instead of one of his nicer rifles that had an expensive stock. Shortly after that article, a shipment of Swedish Mausers came in to my local gun shop, and I bought one for a

whopping \$67.00. Had I known then what I know now, I would have bought 10 of them, but who could have anticipated that these workhorses would appreciate so much? Military surplus has a cheap end, but it also has a deep end. Many of the cheaper guns have risen in value, along with the already highly collectable firearms.

Last September, I had a chance to really take a good look at the collectable side of military surplus and was impressed at what there was to learn. My visit to Rock Island Auction House was like a trip back through time, an educational experience I won't soon forget. That

said, I thought it would be good to share some of the more interesting military pieces that caught my eye.

### WHY COLLECT?

The first questions I asked the folks at Rock Island concerned what they collected and why. As expected, the answers were as varied as the people themselves. Still, when you break them down, the responses I gathered can be roughly divided into a couple of general categories.

### COLLECTING BY THEME

Collecting by theme means that a person has created a set of collection guidelines that

# GUNS



Collecting the FG-42 puts the collector in a private club of sorts, since they are so rare and hard to come by. Just finding extra magazines for this highly sought-after firearm is a feat in itself.

This is a particularly interesting item that was intended as a last-ditch escape device for a German officer. The belt buckle fires .22LR rimfire cartridges. It is heavy piece, and in this particular case, it cannot be authenticated as an original.



generally direct what he or she will acquire. Guidelines could be as loose as what the person desires or finds interesting—which could also be a blanket explanation for nearly collection. A more specific example of “completing a set” would be if a person decided to collect every make and model of sidearm carried in World War II by the Allied forces, or even by both sides. That person would then set out to collect 1911s made by Remington, Colt and Singer. Likewise with the Luger, he would collect the different manufacturers and models such as the Artillery, Luftwaffe, Naval and Army models. A complete set can be defined by anything that the collector determines makes a set. There are commonly recognized sets that run by war or by group, such as German or Japanese-related firearms.

One of the most interesting themes I found was based on technological advancements. This group usually collects based on a firearm’s design and how it contributes to the advancement of firearms. Prototypes are the holy grail of this group. Collecting in this group usually means competing for a small group of firearms that were most likely produced in small numbers for test purposes. An excellent example would be the 1905 trials for the U.S. Army’s contract for a new sidearm. We know now that the 1911 won, but back then it had to compete against the Savage Arms .45 ACP 1907 model, of which there were only about 200 made.

A third would be as an investment. Looking at it purely from a money angle, firearms investing has been sorely undervalued and under-discussed. Taking as an example the 1911 models, which would you guess would be most valuable: a Remington, Colt or Singer? Some people might be surprised to hear that it’s a Singer. What

about the actual test pistols? Few people actually know that Luger also entered into the trials, but only submitted two pistols chambered in .45 ACP. Luger’s .45 ACP models are among the most valuable Lugers ever made. As time passes, certain firearms only become harder to find, driving up their price. Many people collect firearms for the express purpose of holding on to them until they can realize a return on their investment.

## WHAT I SAW, AND WHAT IT BROUGHT

The idea of providing aircrews with a survival firearm was considered by the Luftwaffe for its bomber crews. To make sure they were provided for, the Luftwaffe contracted J.P. Sauer and Son to have a Drilling firearm made that would be issued to each crew. Drilling, incidentally, means “triplet” in German. A Drilling firearm, designated to be the M30, was issued to each bomber. These rifle/shotgun combos would seem out of place as military issue; they were made pre-war and with the utmost quality, since they were to be used as a finely crafted hunting rifle. The two top barrels were chambered in a 12-gauge shotgun with a rifle barrel chambered in 93x74R. The 93x74R is a large game cartridge with a rimmed case. The M30 bore Nazi Luftwaffe marks on both the stock and receiver. Overall, it was in excellent condition and was accompanied by its carrying case with full documentation. Prior to my trip to Rock Island, I did not know that such a firearm existed. Had I ever found one, I would have been left guessing as to its purpose. Without researching it first, I would have simply thought it to be a Drilling with Nazi markings. At auction, this particular model realized a final price of \$20,700.

Continued Next Page.



Beautiful engraving and a multi-colored heat-treat pattern decorate the receiver. The “N” on the barrel is the mark of the German Luftwaffe with Nazi emblem.

Lot 744 is a rare Police Ordnance Company Class III. It was produced by the Police Ordnance Company but originally designed by Gordon Ingram in 1948. It is chambered in .45 ACP. A small number of them were produced by the company. For those of you not familiar with Gordon Ingram, he went on to design the MAC-10 and MAC-11.

|||||



INSIDE MILITARY SURPLUS

099

|||||  
Here is a picture of the full set, the Luftwaffe Drilling M-30 and its carrying case as they would have sat in a German World War II bomber.





Here is a picture of a STG-44 with the Krummlauf curved barrel and optics sights mounted on it, a perfect example of wartime innovation. At that stage, technology might not have been able to pull it off, but the perceived need for a firearm to shoot around things without exposing the shooter was still there.

Although it is not thought of as one of the best pistols from the war, the Japanese Nambu pistol is still highly collectable. There were numerous models at the auction I attended, but the one that caught my eye was a Type 1902 Grandpa Nambu. This particular Nambu came with a buttstock/holster and was an excellent example of the Nambu firearms. Less than 150 Grandpa Nambus are in the U.S. today, although more than 2,400 type 1902s were made. Manufactured in Koishikawa, Japan, at the Tokyo Artillery Arsenal between 1903 and 1906, the pistol was chambered in 8mm. You can identify a firearm produced in Tokyo Arsenal when you see a stack of three cannonballs stamped on the receiver. The Nambu uses an internal bolt system and is similar to the Luger in general appearance. It was originally designed with wooden magazines, which were later switched to aluminum. When I held one, it felt very comfortable in my hand and reminded me a lot of a Ruger Mark I/II/III pistol. Nambus seem to attract their own crowd of collectors, and since they are rare, they bring a fair price at auction.

On auction day, this particular Nambu realized \$10,350.

This next firearm is sought-after by collectors for a number of different reasons. A person might want it because it was a German firearm from World War II, or because of its technological legacy that carries on in firearms to this day. The firearm is the STG-44 Assault rifle, accompanied by a rare accessory, a Krummlauf curved barrel and an optical sighting device. The STG-44 is well known for advancing firearm technology. In fact, it influenced the development of the Gerat 06/06H rifle, which in turn influenced many of Heckler & Koch's early designs. The curved barrel attachment was developed to allow soldiers to shoot out of tanks and around corners. I didn't get a chance to mount it on the firearm and look through it, but I did try it by itself. I was surprised at how easy it was to line up the sights through the viewfinder. Such a piece is extremely rare, and taken with the rifle you would have the centerpiece to most collections. The STG-44, nicknamed the "storm rifle," was produced in 1944 and '45, toward the end of



A Grandpa Nambu, complete with buttstock/holster. The pistol is chambered in 8mm and has an internal bolt. In many ways, it is very similar to the modern Ruger Mark I/II/III.



the war. The STG-44 was an improved version of the MP-43, which was produced in 1943 and battle tested. Both the 43 and 44 were chambered in 7.62x33mm, and the high-capacity magazine is among the innovations it brought to the field. It realized \$63,250 at auction.

The final firearm on my list is one of those Holy Grail quest items for World War II, the Fallshirmajabergewehr FG-42 Paratrooper rifle, more easily referred to as the FG-42. The Luftwaffe contracted this rifle after it realized that its paratroopers needed a weapon to bring with them during jumps. In an earlier assault, the German Luftwaffe had tried parachuting troops and the mainstay of their weaponry separately. During the jump, the troops and their weapons were separated, and the raid failed. Afterward, they started searching for a weapon that the troops could take on jumps. The eventual solution was the development of the FG-42. About 5,000 of these were produced, and they were only issued to paratroopers. The model at the Rock Island auction was a mid-production second model. Many of the FG-42s were destroyed after

the war, and few remain. The design was advanced for its time and influenced designs such as the U.S. M-60. It had many unique features, and it would be well worth a study by any gun buff. Very few of these rifles come up for auction, and when they do, they are in high demand. This particular model realized \$299,000, which was a full \$59,000 over its estimated value.

Military surplus is fascinating, and I covered only a small part of it by looking at mostly World War II collectables. Even if surplus just sounds like an inexpensive beater in your mind, it is worth studying these firearms. Many of them have stories that can teach us a number of things about firearm technology, strategy and political climates. None of these firearms were developed in a vacuum. And as far as the big-dollar items are concerned, even if you can't afford them, they are interesting to learn about.

(A special thanks to Rock Island Auction House for providing all of the photography and background on these firearms.) **IMS**

This is a U.S. trench shotgun Model 12 manufactured between 1944 and 1945. This model was made by Winchester. These shotguns saw use in World War II, Korea and even Vietnam. Trench shotguns are currently growing in popularity among collectors.



# THE UNEQUALED 6



THE MOST DOMINANT MILITARY RIFLES OF

MODERN TIMES.

■ By Chuck Taylor

**I**talk about a challenge. In the years since World War II, there have emerged many excellent (and a few not so excellent) military rifles, so selecting six that would be considered "the best" would be difficult.

After much consideration, we decided to concentrate on which six have been the most dominant. The selection focused on each rifle's proliferation, battlefield reputation and influence on military rifle development.

In the following pages are the six that ultimately made the cut.



# NO.1 U.S. .30 CALIBER CARBINES M1, M2 & M3

With more than 6.5 million produced, the U.S. Carbine, caliber .30, M1, M2 & M3 ranks among the most dominant military rifles of modern times.

First appearing in 1940, this carbine was the first U.S. military rifle to utilize ammunition with non-corrosive priming, and it was in continuous production from September 1940 until August 1945.

Intended as a substitute for the M1911A1 .45 caliber pistol, it was created for use by soldiers whose missions didn't require a full-sized rifle. Such personnel included officers, crew-served weapon team members, armored crewmen, artillerymen, paratroopers and support troops, among others.

Chambered for a short .30-caliber cartridge that was roughly equivalent to the .32-20 Winchester, it met the Army requirement for a lightweight, compact rifle with an effective range of 300 yards. Unfortunately, though convenient to carry and shoot, its military FMJ ammunition quickly garnered it a reputation for being a poor manstopper in battle. Combat troops to whom it was issued quickly began to discard of it in favor of more proven weapons like the Thompson submachine gun.

As if this wasn't enough, the weapon itself began to receive criticism for marginal functional reliability, particularly in the cold temperatures typical of Northern European winters and the harsh natural environments of the Pacific Islands. Both criticisms were to

plague it for its entire career, particularly during the bitter cold winter campaigns of the Korean War, where many U.S. troops even threw it away and made do with whatever other weapons they could find. In fact, it had such a poor reputation that the troops in all but one of the units felt that it was the worst weapon of that war.

Utilizing a 15-shot magazine, the M1 carbine was the first in its series. Predictably, a folding stocked version known as the M1A1 appeared for use by airborne troops. By late 1944, a select-fire version known as the M2 surfaced, which utilized a 30-shot magazine. During the latter stages of the Korean War, the infrared-sighted M3 utilized one as well, and this was America's first attempt at a serious night-vision weapon small arms system.

As late as the Vietnam War, the .30 carbine — typically in its M2 version — could be found, most often in the hands of Vietnamese troops and their U.S. Special Forces and MAAG "advisors." Because of its small size and light recoil, it became a popular weapon in particular with the small-statured people of Southeast Asia.

Due to the aggressive anti-communist posture the United States adopted during the Cold War, the .30 carbine was widely disseminated around the world. As late as the 1980s, it could be encountered anywhere from Africa to the Philippines, to Latin America and even in Eastern Europe, where

during World War II it had been provided in quantity to hundreds of anti-Nazi guerilla groups.

Interestingly enough, its M2 version inadvertently met the classic German criteria for assault rifles. That criteria stipulates that the weapon must:

1. Be a carbine.
2. Utilize an intermediate-powered cartridge that was more potent than a pistol cartridge, but less powerful than a full-sized rifle cartridge.
3. Utilize a detachable box magazine.
4. Be capable of executing fully-automatic fire.

Via a selector switch located on the forward part of its receiver, the M2 had an official cyclic rate of 750 rpm, but the actual rates varied from 550 to as much as 900 rpm, which was too fast for its magazine to feed reliably. The M1's original 15-shot magazine also did not hold the bolt open after the last shot was fired, but as a stopgap measure, the later 30-shot M2 mag incorporated a follower that had the ability to jam the bolt open.

In summary, though they are among of the most dominant military rifles of modern times, the U.S. M1-, M2- and M3-.30 caliber carbines have inherited a mostly negative legacy. As an "advisor" to Vietnamese Popular Forces during the Vietnam War, I carried and used one for some time and saw firsthand that criticisms as to its mechanical unreliability and poor stopping power were indeed true.



M1 and M2 carbines were similar in appearance, with the M2 utilizing a slightly more robust stock and handguard. Selector switch for the M2 was located on the left side of the forward portion of the receiver.



## NO. 2 M1 GARAND

Without question the .30-06 M1 Garand was the rifle that marked the end of the bolt-action era and revolutionized military rifle design. Designed by Springfield Armory engineer John C. Garand, it was adopted in 1936 and deployed in the early years of World War II. The Garand quickly found favor with U.S. troops, generals and the enemy as well, with General George S. Patton declaring it to be "the finest battle implement ever devised."

More than six million M1s were produced, and its career spanned several decades. It was used by dozens of nations in the post-WW2 era and even saw service as late as the Vietnam War.

From a design standpoint, the Garand was also revolutionary, and it was the basis for the U.S. M14 and Italian BM59.

However, it was not without its detractors. Those weaned on the traditional bolt-action rifle claimed that the semi-automatic Garand would be "inaccurate," which was quickly disproven. It was also claimed that the M1 wasn't as reliable as the M1903 Springfield it replaced, and its early service in the Pacific Theatre at Tarawa reinforced that notion. Nonetheless, the Garand's problems were found to be lubrication-based and were quickly solved, allowing it to become one of the most famous military rifles in history.



## NO.3 SKS

Following World War II, the Russians fielded their own semi-auto rifle, the SKS. Designed by Sergei Gavrilovich Simonov, it first appeared in late 1945 and was the first rifle to ever utilize the 7.62x39mm cartridge. With an excess of 15 million of them produced, the SKS quickly proliferated. It was the standard service rifle of not only the Soviet satellite nations, but dozens of third world countries as well, until it was officially replaced by the AK47 in the 1960s. In fact, it can still be encountered today virtually everywhere.

Though of conventional design and configuration, the

SKS did have several unique and notable features for the time. First, it featured a 10-round internal magazine that was loaded via a 10-round stripper clip, giving it a bit more capacity than was typical at the time. Second, the magazine body itself was hinged and could thus be swung out for cleaning or inspection, something not typical of semi-auto rifles in those days. Third, because it utilized the lesser-powered 7.62x39mm cartridge, it could be made smaller and lighter ... a carbine, in fact, rather than a full-sized battle rifle. For those of smaller physical stature, it became an immediate favorite.

## NO.4 AK-47

Having been on the receiving end of the first true assault rifle, the 7.92mm German StG44, the Russians quickly saw the advantage of having a lightweight carbine that fed from a removable large capacity magazine and possessed both semi-automatic and fully-automatic capability. However, the limitations of the Soviet production system and their fundamental military philosophies precluded the degree of sophistication found in rifles produced by the Western nations. Moreover, the training of Soviet troops at the time was rudimentary at best. Due to the poor maintenance that inevitably resulted, it became

clear that whatever rifle was developed should, first and foremost, possess extreme mechanical reliability.

Designer Mikhail Kalashnikov, a wounded combat veteran himself, was all too aware of this. He incorporated the extreme reliability factor as the nucleus of what was to become the most famous rifle in military history – the AK47. The Avtomat Kalashnikova, Model of 1947, was accepted by the Soviet military in 1949 and went into production almost immediately. Manufacturing economy and production time was a major concern to the Soviets, who had

to arm and support one of the largest military forces in the world. As a result, in addition to being exceptionally reliable, the AK47 was simple to operate and remarkably easy to maintain, relatively light and compact, sufficiently powerful and adequately accurate to meet Soviet needs. Though crude by Western standards, the AK series quickly reached worldwide status, with an impressive 75 million of them produced. If its variants are considered, that number climbs to an even more stunning 100 million.

Is the AK47 the “best” military rifle? A tough question, because the answer depends upon

the fundamental military philosophies involved. Western nations train their troops better, have more sophisticated communications and logistic support systems and also utilize a wider variety of tactics to minimize personnel losses, so weapon design and training in maintenance isn't a problem.

The Russians, on the other hand, did not possess

these capabilities, and thus had to utilize mass-attack philosophies to achieve their military objectives. In short, their approach to war was — and still is — less toward minimizing their personnel losses and more toward the simpler strategies and tactics of mass attack to achieve their goals. For that purpose, the AK47 is the perfect rifle.





## NO.5 FN-FAL

By 1949, the United States and other Western nations united to form NATO to combat the Soviets, and the Cold War became more intense. Because it was envisioned that NATO's member-nations would fight side-by-side against the Russians, it became obvious that their weapons, equipment and logistic systems would need to be universal.

The U.S. military had completed a detailed evaluation of WWII German small arms and had come to appreciate the assault rifle concept as represented by the StG44 and AK47, but because of the sheer number of Garands and .30-06 ammunition available, resisted their replacement. A somewhat leisurely program to find a suitable replacement for the M1 was instituted in 1946, but it was not at the time considered critically important, so the venerable Garand and .30-06 remained in official service until 1958. In truth, however, both of them continued to serve well into the 1960s, and they saw considerable action in the early stages of the Vietnam War.

The problem with the U.S.'s decision was that it precluded the universality of weapons and equipment needed to make NATO function to its highest level of efficiency, and several member nations thus endeavored to find a more modern rifle for their needs. Fabrique Nationale, which was — and still is — one of the world's largest arms manufacturers, endeavored to market a rifle to fill the void between the M1 Garand and AK47. After a few years of research

and development, and no small amount of political maneuvering, the company produced the rifle that was to be subsequently known as "the right arm of the free world" ... the FAL. Although the FAL was not an assault rifle, it did utilize the then-new 7.62x51mm (.308 WIN) cartridge being promoted by the U.S., and the detachable box magazine was ergonomically and mechanically superior to the Garand. Because it utilized a central receiver design, it could be configured with minimal effort, both as an individual infantryman's rifle and as a squad automatic weapon.

The FAL, in its standard, paratroop and squad-auto versions, was offered in 1953 and quickly accepted. It proliferated like wildfire, becoming the standard military rifle of more than 120 nations. By the time it ceased production in 1988, more than two million had been produced, and it remains in service to this day.

The most famous and ironic event in its history occurred during the Falklands War, when both sides utilized slightly different versions of the basic FAL against each other. Yet because the Argentine version was metric and the British version utilized inch measurements, the magazines and most of the internal parts were incompatible.

Another keynote of the FAL's history is its immense proliferation throughout Africa during the 1960s, during which time it became somewhat of a symbol of eliteness among the troops. Renowned for being tough, reliable, user-friendly and accurate, it was much sought-after and is still widely used there today.

**"It proliferated like wildfire, becoming the standard military rifle of more than 120 nations."**

As the U.S. was increasingly drawn into conflict in Southeast Asia in the late 1950s, it became apparent that even if it had been available in sufficient numbers, the 7.62x51mm M14 was too large and heavy for efficient jungle use.

The U.S. Air Force had recently adopted the revolutionary 5.56x45mm (.223 REM) AR-15 as a survival rifle for SAC bomber crews and base security personnel. Secretary of Defense Robert S. McNamara began to push hard for universality of weapons and equipment within all U.S. military forces, so the AR-15 was battlefield-tested in 1960-61 by U.S. Special Forces and SEAL teams in Vietnam. After a prolonged test period in actual combat, it was found to be suitable and was adopted in 1963 as the M16.

The M16 was the first U.S. assault rifle, and it experienced a rocky start due to mechanical problems in its baptism by fire in the early days of the Vietnam War. However, it should be noted that its inventor, Eugene Stoner, had pointed out the potential problems early on, but had been ignored by the military.

Specifically, the tropical jungles of Vietnam were a tough natural environment, with temperatures of more than 100 degrees Fahrenheit and 100% humidity common. Along with the fact that it rained virtually every day there, the high temperatures and humidity would cause serious corrosion problems in the weapon's bore and chamber areas.

Stoner suggested that hard-chroming both would eliminate the problem, but he was ignored by the U.S. Army, and the M16 thus became the target of a tragic controversy in which several hundred U.S. troops were killed because their weapons failed due to corrosion damage. The problem was then corrected, and the M16 in several configurations has gone on to serve with distinction. In fact, it has been in service longer than any other previous U.S. rifle.

Unfortunately, its 5.56x45mm cartridge has not been so fortunate. From the moment it was adopted back in 1963, it has amassed an unenviable reputation as a poor manstopper with FMJ military ammunition. However, the U.S. Army insists otherwise, so the problem persists.





As U.S. soldiers and Marines have become more and more overburdened with equipment, the need to make the M16 more compact has resulted in the M4. Essentially a third generation of the Vietnam-era XM177E2 "Commando" — itself merely a compact version of the M16 — the M4 is light, handy and fast. But like its M16 predecessor, it suffers from controversy about its mechanical reliability as well as its poor stopping power — this time over in the dusty deserts of the Middle East.

While many here in the U.S. officially and unofficially pooh-pooh both issues, the troops in the field are all too aware of them and are forced to deal with them as best as they can. I have both experienced and witnessed repeated failures to stop against enemy personnel with 5.56x45mm FMJ military ammo with solid, well-placed hits, so in my view, the controversy is well-founded. To date, recommendations to replace the 5.56 with a larger caliber cartridge have also been rebuffed. Though the Remington 6.8mm SPC cartridge performed quite well in the hands of U.S. Special Operations Forces in both Iraq and Afghanistan in both the M4 and FN-SCAR, no plans to adopt it have been announced.

As early as 1960, Colt advised the U.S. Army that replacing the direct gas flow into the bolt carrier key of the M16 with a more conventional gas piston system would greatly enhance its reliability, but their advice was completely ignored. Since then, there have been several more occasions in which this same remedy has been suggested, but no action has been taken by the U.S. military thus far.

Because it features a gas-piston instead of direct gas feed into the receiver like the M16/M4, Heckler & Koch's M416 is a great example of how good the M4 could be. But with current U.S. military budgets constantly being slashed, along with the internal political strife within the U.S. military, it's unlikely that any changes will take place in the foreseeable future, so the plan to replace the standard M16 with the newer M4 version continues to move forward.

## PICK SIX

These are the six most dominant military rifles in modern history. Their proliferation is worldwide and their reputations well-known, although not always accurately understood. There are certainly other perfectly good rifles. The M14 is one example of a gun that was well-performing but wasn't produced in sufficient quantity to even reach service-wide proliferation in the U.S. Army before it was replaced.

The U.S. .30 caliber carbines M1, M2 & M3, the M1 Garand, SKS, AK-47, FAL and M16 are by far the most dominant military rifles in modern history. Between them, they reflect the best efforts of the cultures, economies and military philosophies that produced them and obviously, for their intended purposes, they're all excellent choices.

Whether you agree or disagree with whether they are truly "the best" military rifles, remember this — the numbers don't lie. **IMS**

---

**"The M16 was the first U.S. assault rifle, and it experienced a rocky start ..."**

---

# "Soldiers of FACTS made

IT AIN'T NECESSARILY SO!

■ By Jim Thompson

**T**his is a short examination of a few of the military, history and paraphernalia-related errors that are often accepted as fact, but are not. No one can ever hope to cover them all, but it's the principles that are important!

## MEDIEVAL MYTH

In medieval times and even for millennia before that, much of what was considered "history" was passed on through oral recitation. A great deal of it was sung, and some was recited as poetry. Naturally, the "tellers of tales" tended to embellish, improvise, add, subtract and streamline. There were of course also changes in names, mix-ups in chronology and fairly frequent rhythm and rhyme enhancements made by subtle alteration of tidbits here and there. The adaptations weren't always made with sinister motives, either.

An ancient yarn — itself undoubtedly apocryphal, but amusing and illustrative — was related to me years ago by an Italian friend, discussing some long ago Caesar who stood at the crest of a hill somewhere far to the west of Rome, beheld burning villages and piles of barbarian corpses and snapped to his recording scribe: "Let it be said that I, this day, slew millions of animalistic enemies of the Empire."

Looking up, the archivist responded by pointing out that there were only a few hundred dead reposing in the field. The Emperor glanced at the literary fellow laboring to make cryptic notes. Caesar's aide quickly noted: "Do you perchance recall what happened to the last chronicler who refuted a Grand Imperator?" The scribe quickly made a few cross-out scratches. "And Magnificence, did you say 'millions' or 'billions'?"

The moral here isn't about censorship or even power — albeit those elements are certainly present in that little parable. Instead, it's about truth falling off the track to serve other agendas.

Mythology can be and fairly often really is largely

factual. It's the telling and reiteration that changes proportions. Fantasy, on the other hand, is never factual, and often has only a peripheral, contextual relationship to hard reality.

Some of this myth-adapting agenda is driven, usually for someone's profit. Some of it, as with the old "tellers of tales," involves small anecdotes, themselves valid, improperly analyzed and taken to represent a grand and overarching type of "truth." Often — especially in relationship to military hardware and firearms — mistakes are made or memories blurred. And then there's the "Hollywood factor," wherein someone's attempt to contrive an amusing yarn eventually becomes part of conventional wisdom.

The adage about war's first casualty being truth surely applies. And it likely began a few minutes after some caveman found an enemy from another group lying dead, perhaps from falling against a boulder, and decided to be a hero and show his tribe the rock with which he valiantly slew the vicious enemy.

## FLYING TIGERS

Move forward in time and one can watch David Miller's 1942 film *The Flying Tigers*, which depicts a group of near-bandit mercenaries flying against the Japanese in China long before Pearl Harbor. Let the record show that the real Flying Tigers, whose actual name was the American Volunteer Group, was very tightly organized by Claire Chennault and didn't fly their first mission until December 20, 1941.

In fact, almost nothing in the film is accurate, chronologically, tactically or otherwise. All of the official histories of the group and memoirs of pilots and staff verify details, many mentioning the celluloid fantasy with tidbits of anger, others with considerable humor. Chennault had been de facto commander of the entire Chinese Air Force for several years; so some of the fantasies are spun, as are most tall yarns, with tidbits of real information tossed in. Yet many still believe that the film chronicles real events, people, and times.

# FICTION AND of fantasy’’



Myths about military history can begin in any number of ways.



## SUICIDE TALES

Strangely distorted facts such as the “suicide” tales of Colin Kelly are also believed. Kelly was a hero in his own right, but the spin-offs that have him crashing his B-17 into a Japanese battleship are — to be more polite than is justified — exaggerated enough to border on hallucination. There have been several such “alternative realities” tied to this particular episode, some of which were based upon odd combinations of actual events that were somehow tied together and inflated.

There are volumes largely dedicated to unraveling the pieces of popular history that are flawed in this way. An excellent but hard-to-find 1979 volume by Martin Caidin, *The Ragged, Rugged Warriors*, covers the crazy sequence of events that took place historically between 1937 and 1942, and also discusses a lot of the equipment involved. This book, just like many of the author’s other works, puts the history, men and hardware into interesting contexts. Hollywood influences contribute mightily to other mythical confusion, as well as misremembered tales from veterans long removed from their experiences.

Some small examples of the Hollywood myth: Many volumes record that the German “Schmeisser” (which was actually an ERMA design—Schmeisser had nothing to do with the MP.40) shot “very fast,” much like the vaunted MG42. It didn’t. Schmeissers chugged along at about 500 rounds per minute—slower, in fact, than a typical Thompson submachine gun. It is possible that some veterans thought they’d heard it, but more likely they succumbed to the suggestion of Hollywood sound overdubbing.

I was told, some 40 years ago when I took a decorated WW II veteran out to fire a few fully-automatics from that conflict, that there was “something wrong” with my MP40 because it “fired too slow.” It was an odd duck, that gun, internally polished such that it actually shot considerably faster than normal. I could see no reason to argue with the gentlemen’s recollections, and we simply moved on.

Until fairly recently, many observers dismissed Japan’s entire output of rifles—generally called “Arisakas”—as “little more than junk,” with some wags opining that they might even be “dangerous.” There’s a tiny kernel of fact in this, since some of the cast-receiver “practice rifles” intended for orientation could yield unpleasant surprises when fired with full-power ammunition. Most were marked for blank firing

only—in Japanese, no less. But the Type 38 Arisaka and the later Type 99 took more pressure and abuse under test by P.O. Ackley and others than any other then-extant bolt action, surviving relatively unruffled at pressure levels that would’ve reduced a Mauser or Springfield ‘03 to fragments. (Note: Japanese scholars actually prefer that the Type 99 not be called “Arisaka,” as its adoption followed the death of Colonel Nariakira Arisaka by some 24 years.)

This perception is really a whole set of logical jumps based upon half-truths and frankly, ignorance. The service rifles were solid, and while nowhere near as versatile as the Mauser from which they evolved, they were stronger, and more than capable performers even if they were not as slick. The older Japanese cartridge, the 6.5x50—called the “Jap .25” and once described as a “weak round” whose “hit is not much worse than pin prick”—was ahead of its time, and many researchers keep running across it in F.N. F.A.L. experimentation. They are also startled to find that the Soviet Federov, which was on the verge of being the “first assault rifle” that never happened, was chambered for this cartridge.

Bordering on the unknown is the M38 Arisaka’s use by the British and Russians in fairly considerable numbers. Fred Honeycutt’s work on Japanese rifles

Hollywood can contribute to myths in the way they present their version of a story.



touches on some of this use. Older editions of W.H.B. Smith's *Small Arms of the World* pursue the Federov, which George M. Chinn of the USMC also touches on in his work. In fact, admirers of the smaller bore, efficient cartridge tended to be many in number, and they were seldom novices.

Sneered at in propaganda films as "nothing more than a hose," the German MG42 was belittled as firing too fast, and therefore inherently inaccurate. It can be poorly handled, and it surely can be a bullet-spraying hose, but it's still in issue as MG42/59, MG1, and MG3 in about 12 countries, and it has been produced in at least four — even as recently as the last decade. Many of the weapons enunciated as "better" by

ordnance officials, including our own M60, have since been reduced greatly in status or even totally retired.

The MG42 was

a quantum leap in manufacturing and firepower. Called "Hitler's saw," it terrified infantry with its 1200+ RPM rate of fire. Modern postwar Italian versions use a modified bolt/buffer mechanism that cuts that rate to about 850, but reality and experience tell us that a disciplined gunner can be extremely accurate even at great range. I cherish a photo of myself bouncing an old steel helmet across a range (after getting permission!) with an MG42 fired from the hip just over 100 yards downrange, even boastfully landing one just under the "pot" and striking it while it was still in the air.

The trick? Short bursts and overall discipline. A good friend who owns an MG42 popped a roughly four-inch rock with it at well in excess of 300 yards. It required full magnification of the spotting scope to view. After a couple of short bursts, of course, that could no longer be done — there was nothing wrong with the weapon, but the rock had become dust and pebbles.

#### PATTERNS OF WIT AND WISDOM

Some fiction is based upon collectors' biases, and these aren't so much wrong in the literal sense as they are prone to become confusing side currents.

First there's the "older is better" or "favor early models" mythology. Again, this is not complete balderdash — but it tells an incomplete tale that is frequently wrong. To be blunt, there are reasons with firearms and military equipment, just as Consumer Reports cautions often with new automobiles and appliances, to avoid being the "first on your block" to purchase. Flaws and wrinkles often take a while to surface and longer to be worked out.

In regard to guns, this mantra is spillover from

collectors' value and rarity considerations.

Try firing an old, original Model 1911 sometime, barehanded and gripping firmly. The often-bleeding pinch mark on the web of your hand will explain to you why the grip safety was reconfigured rather quickly. The sights are demanding, to say the least. There were heat treat problems that caused frame cracking early on, too, and some failed precipitously. These are handsome pistols, valuable and beautifully made. But "better"? Not necessarily.

When the 1911 first came into play, the under-loaded .38 cartridge that immediately preceded it had fallen into relative disrepute, and there were many — in the popular press, the majority — who felt that

semi-automatics as a group were inherently inferior.

Going back to the 19th Century, genuine early Colt Model "P" 1873 single actions in

top condition are nearly priceless. But if one wishes to actually shoot one of them, one of the post-1892 specimens with the so-called "smokeless" frame is a much more serviceable alternative, for reasons of both potential value loss and strength.

I perpetually run into folks who maintain that the old bolt-action 1903 is a better rifle than its successor, the M1 Garand. As much as I may be regarded as an M1 advocate and researcher now, I swallowed that myth hook, line and sinker more than five decades ago. Yet even through trying repeatedly, I never succeeded in getting a 1903 that would even equal a solid M1 for accuracy or comfort.

Then I stumbled across a ton of old targets, scores, and data from the first post-World War II "National Match" competitive season, and I realized that the M1s, though merely selected service rifles, shot higher aggregate scores with service grade ammunition than those compiled in 1939-41 with match quality ammunition. Moreover, the military M1903 bolt guns entered simultaneously in various competitions did not score nearly as well as the Garand, almost without exception. And it's worth mentioning that the '03s in those cases were virtually all match-prepared rifles. The M1s were merely "selected."

Factually, even among Springfields, I did my best when I was shooting with the later, "stamped parts" 1903A3, probably largely due to the superior receiver "peep" rear sight setup.

It's true that with a heavy match barrel, massive bedded butt stock and lots of other alterations, the '03 can be a particularly brilliant performer. But at that point, it is no longer a military rifle.

## "Some fiction is based upon collectors' biases ..."

Still, when it came time to present my grandson with a rifle, I succumbed to tradition, mythology and conventional wisdom, preparing a custom, match-barreled Model 1903. It was secured in a tight CMP "C" target stock, with a mild trigger job added. He was accustomed to his father's Model 1917, and I was sure he would prefer it. Still, I encouraged him to do comparative testing. The 1903 shot well, but he did far better with the M1. He was far more enthusiastic too, shaking his first and exclaiming, "I love it! I love it!"

The "earlier is better" mythology appears in old articles on the Krag v. Springfield '03 discussions early in the 20th Century. They seem odd and funny now, but there were those who claimed that the Krag was more accurate. And while I haven't looked, there were surely some who claimed that the old "Trapdoor" Springfield was better than the Krag, and before that someone surely claimed the cartridge change from .50/70 to .45/70 with the latter's smaller bullet would be a disaster.

Somewhere, too, was probably the odd early '03 with serious developmental problems that was not quite as accurate as its predecessor. And so on down the line it goes.

Really, all of that talk about repeating rifles causing ammunition wastage was correct, too. But nobody actually got the chance to ask Custer if repeating rifles could function properly in a firefight. Ammo-wasting and suppressive fire are apparently often the same thing, and he never got the chance to employ either of them.

Regardless of these conflicting opinions, engineering progress marches on. An early specimen of any product may be interesting and valuable, but as a tool, it can often be a far less viable instrument than those which follow, wherein the bugs are sorted out.

To choose a classic example from my own bailiwick, the last M1 Garand rifles delivered circa 1956 in the U.S. and in the 1960s or early 1970s in Italy were far superior to the specimens from two decades earlier. This is purely from a practical point of view, of course.

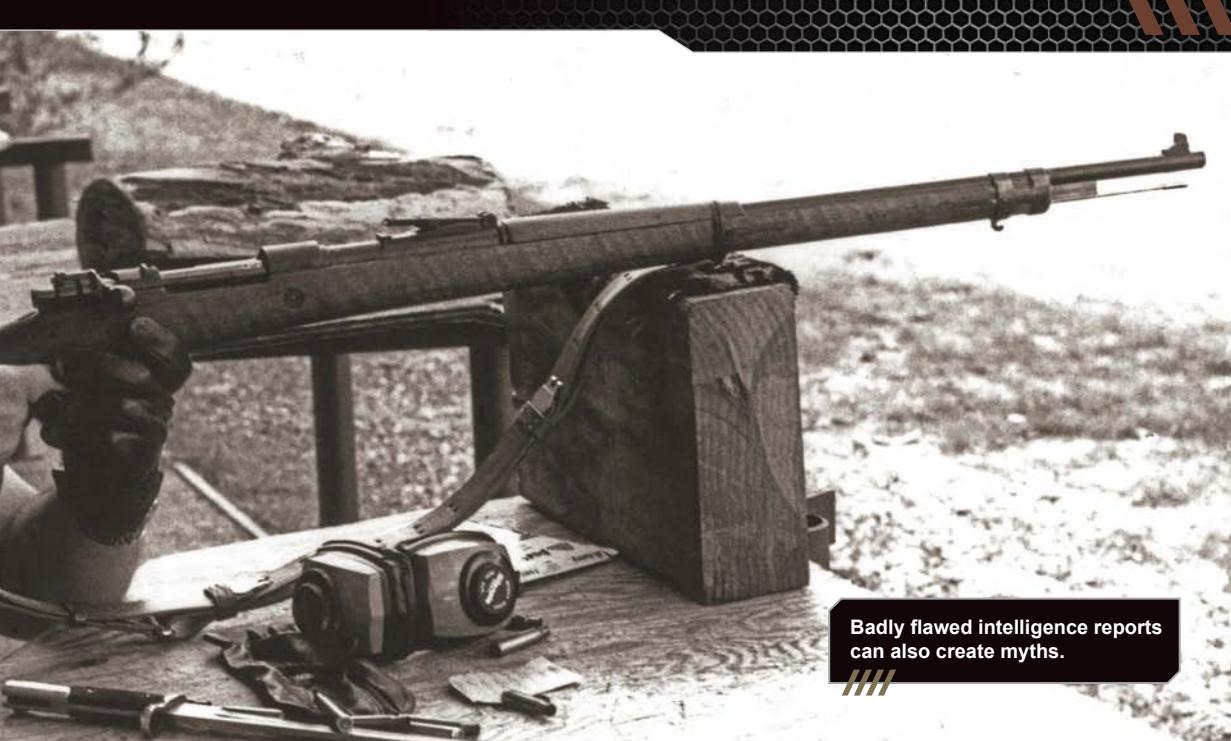
The old saw about milled parts being somehow superior to stamped parts is another common legend that doesn't have much to do with reality. Actual work on a milling machine is a means of configuring material to dimensions and shape. It can be quite individual and time consuming, but it often looks better. Such parts begin as forgings or castings, sometimes even as cut bar stock. Stampings begin similarly, but are formed under pressure. They are sometimes machined or milled afterward, especially if there are flaws.

In most cases, however, stampings are stronger and lighter, and if made out of spring material they boast higher levels of tensile strength. The bands of many classic military rifles are good cases in point. The stamped trigger guard of the M1 Garand, which assumed this configuration in late 1943, was stronger, easier to adjust in the field and slightly lighter than the milled version. The earlier trigger guard is sometimes preferred for appearance's sake, and it offers the small advantage of a built-in tool orifice for stripping the rifle. But — with



Conflicting opinions and misremembering facts can contribute to myths in, for example, how a firearm operates.





Badly flawed intelligence reports can also create myths.

the exception of Winchesters up to the end of World War II — the milled guards were no longer considered “correct” after early 1944.

The earliest K98k Mausers are likewise fascinating. By the mid-1930s, the action was well tested to the point where there wasn’t a great deal of strength refinement to be done or even contemplated. But the sight hoods, cupped butt plates and laminated stocks of a half-dozen years later greatly improved on the service function.

There are also, at times, elements of competitive disparagement involved. There was a literal campaign to erode confidence in the simple, straightforward Reising Model 50 Submachine Guns, made to appear “legitimate” by some glitches with prototypes committed to service too early. But in the experience of those who have used them extensively (myself included), the bad press was mostly fiction. True, the magazines were only 12 and 20 rounds, but the unreliability was grossly exaggerated. I’ve never had a jam with a Reising, and I’ve been shooting them off and on since the ‘60s. I can’t say the same for the much-more-expensive Thompsons.

The main beef with the Reising was that it was “cheap.” In the end the Thompson was first supplemented, and then replaced, by the M3 and M3A1, which cost far less than either previous gun and really were “cheap.” That whole adventure really started with the STEN, which was also dismissed and given awful labels like the “Stench Gun” and the “Woolworth Special.” There were some serious magazine problems with the STEN, but generally, the performance of that tubular wonder was truly astounding, when one considers it cost less than a

decent meal for two in those days at a mid-grade restaurant — as little as \$6 by some accounts.

Research is accomplished by examining specimens, documents, literature and photos. In my younger days, I spent way too much time digging through document repositories. The interviews I did with veterans back in the ‘60s yielded a lot of information, along with a lot of strange memories of badly flawed intelligence reports. So the most important thing to do in that type of endeavor is verify, verify, verify. And verification consists of digging through sources whose agendas are either very clear or nonexistent, the latter being preferable.

Not long ago, when someone asked me about a rather trifling matter, I mentioned that I’d not found more than a small handful of verifiable photos of a particular piece of ancillary gear that was in combat use until the very end of World War II. Immediately attacked, images were posted, sent and displayed of that item in areas and at times that were supposedly uncommon. I recognized several of the photos that were purportedly shot in Europe. They were actually shot at Fort Dix and along the Carolina coast on landing exercises, by the very fellow who passed on to me his former G.I. Anniversary Speed Graphic 4x5 camera. He’d shown me prints and shuffled through some old negative sleeves, remarking that, “They were for wirephoto release as invasion photography, and so I marked them, as ordered, ‘combat photos, for release on June 5th through the 7th, 1944.’ I didn’t know why that particular date...”

Now, we do.

Sometimes, fiction lasts longer and wears better than fact. And sometimes, there is only a razor’s edge of difference. **IMS**

# The Hi Power

A HISTORY OF EXCELLENCE.



An early Hi Power with the classic tangent sight.

■ By Bob Campbell

In a perfect handgunning world, all pistols would have the mix of history, performance and collector interest held by the Fabrique Nationale Hi Power. While Hi Power pistols can be valuable and collectable, they still fire the readily obtained 9mm cartridge. The Hi Power is also among the most recognizable handguns in the world. If you scan the news, you may see a Hi Power in the hands of the Indian police or being waved during a street battle in Iraq. Our Canadian allies issue the Hi Power, and it works as well today as a battle pistol as it ever did in years past. The Hi Power has been issued to the armed services of more than 50 nations. A generation ago, it was issued to elite units in the United States including the New Jersey State Police Fugitive Squad and the FBI Hostage Rescue Team.

The history of the Hi Power is steeped in intrigue. The pistol was first developed by John Moses Browning as a European service pistol. Browning was a great inventor, but he was also among the greatest gun salesmen of all time. While





fans of the Colt 1911 may decry the small-caliber 9mm and derisively call it the "Half Power," their .45-caliber service pistol would have been unthinkable in Europe. Browning did not base his Hi Power on the 1911 but upon Browning principles. In this same fashion, the Tokarev and French 1935 — by different inventors — are based upon Browning's work.

Originally, the Hi Power was intended for the French army. The French did not want a grip safety, and none was supplied for them. In my humble opinion, Browning had learned a few things since 1911, and the Hi Power was therefore designed to be produced as economically as possible. The Allies

left World War I with a great respect for the Hi Power's 9mm Luger cartridge. The 9mm met French requirements and also offered a good level of power for its compact size. The Luger cartridge is so compact that 13 cartridges could be effectively stuffed into a relatively compact magazine.

Browning further refined his locked-breech action to eliminate the swinging link. The result was the Hi Power, known to the French as the "Grande Puissance." Sadly, Browning died in his Belgium office before the final work was completed. Still, early models illustrate that Browning truly defined the Hi Power. Belgian small-arms designer Dieudonné Saive, a

respected inventor in his own right, refined the pistol and gave us its final form. The Hi Power is a well-balanced handgun and among the finest service pistols of all time.

The French did not adopt the Hi Power, but it still saw immense commercial success. Early variants were shipped to China as well as many South American countries. During World War II, the Germans took over the Fabrique Nationale plant and turned out the Hi Power for the Wehrmacht. Canadian John Inglis, a respected maker of ship's boilers and other armaments, took up production of the Hi Power for the Allies. The Hi Power bears the distinction of serving on both sides of practically every international

Continued Next Page.

**There are few handguns that sit in the hand as comfortably as the Hi Power. Balance, known as "heft," is excellent.**





# The **Hi Power**

This military intelligence officer checks out a vintage Hi Power and finds it good.

118

INSIDE MILITARY JURISDICTIONS

conflict since 1939. The Hi Power has been in continuous production and remains a popular handgun today. A look at the specifications of the Hi Power shows that it is ideally proportioned for the cartridge it chambers. There is enough weight to absorb the recoil of the 9mm cartridge, but the pistol is light enough for daily carry. The grip also fits well in most hands. The trigger press is straight to the rear, and the pistol is flat enough for concealed carry.

## HI POWER DIMENSIONS

Barrel Length: 4  $\frac{5}{8}$  inches  
Sight Radius: 6  $\frac{1}{2}$  inches  
Overall Length: 7  $\frac{3}{4}$  inches  
Weight: 34 ounces

The pistol is all steel, and it is well made of good material. The Browning design has gone through several generations, but each is recognizable as a Hi Power and the changes have been minor — usually limited to differences in the sights and manual safety. The early versions feature a slide-lock safety that is smaller than many competing types. However, with practice, the safety isn't as difficult to manipulate as some would have you believe. Just the same as in a dedicated defensive handgun, the Cylinder & Slide



Inc. extended safety is an invaluable aid in speed and positive function. The original safety's credits include that it is positive in operation and unlikely to be inadvertently moved to the Off Safe position. The slide stop and magazine release are easily reached and manipulated. Most but not all Hi Power pistols feature a "magazine disconnect" that prevents the pistol from firing if the magazine is not in place.

The Hi Power is smaller and lighter than the 1911 .45 and handles quickly. With the greatest respect for the

1911 and its action speed, it must be said that if there is a handgun faster to an accurate first shot than the 1911, it is the Browning Hi Power. However, while the intrinsic accuracy of the Hi Power is often very good, practical accuracy is limited by its sometimes-heavy trigger actions. Over the years, the RCBS trigger-pull gauge has measured Hi Power triggers at five to 11 pounds — there seems to be no rhyme or reason. The tangent action isn't easily improved. It is a shame that the heavy trigger action limits accuracy potential in many variants, but then again, the piece was designed for short-range combat. There are also many experienced shooters who

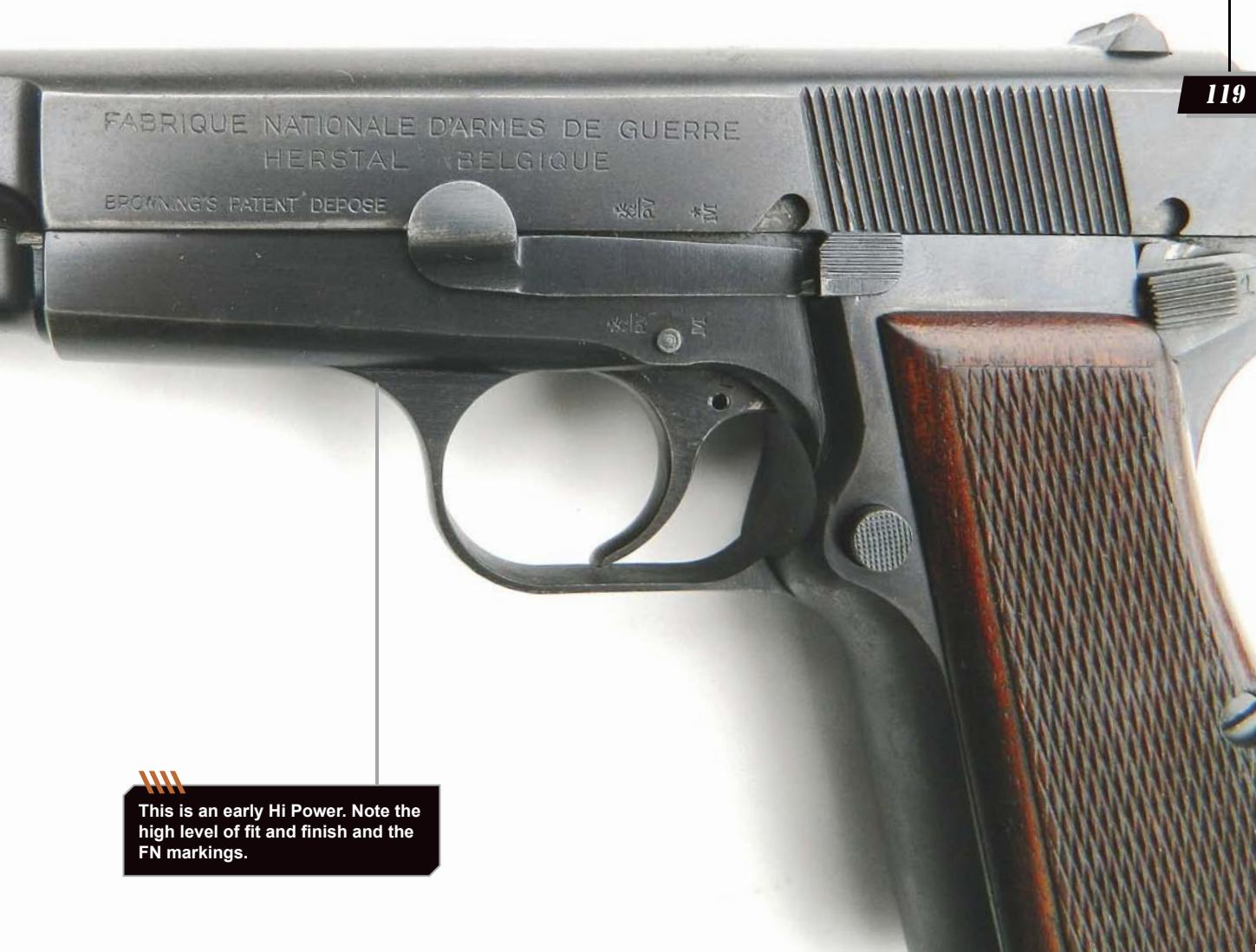
control the trigger and manage good hits in spite of the trigger action. As long as the trigger is consistent, little else matters to these practiced marksmen. Another advantage of the Hi Power is its fast loading speed. To replenish the ammunition supply, all that is required is to quickly insert the tapered magazine into a generous magazine well. There is no need for a magazine chute with this pistol.

The Hi Power features a heavy hammer spring, which makes thumb cocking more difficult. However, there is a reason for the heavy spring. Ammunition in 9mm Luger has been produced in many countries. Quality in these cases

sometimes suffers, leaving the Hi Power to function with every load and handle variations in case length as well as hard primers. The Hi Power's hammer gives the primer a solid hit, and the pistol has excellent reliability. Around 1962, the design of the extractor was changed from internal to external.

A complaint leveled against the pistol that may have little basis in reality is an appraisal of the longevity of the pistol and the claim that some have soft steel. It seems unlikely that Fabrique Nationale would produce so many reputably fine shotguns and rifles and then use Basque steel in the Hi Power. Nevertheless, claims of cracked slides (without

Continued Next Page.



This is an early Hi Power. Note the high level of fit and finish and the FN markings.

photographic proof) are common. Personally, I am certain that some Hi Powers have cracked slides. However, so do 1911s, Berettas, P38s, SIGs and Glocks. I have examined well-used wartime Hi Powers that rattled when shaken. The barrel lugs were well worn, and the frame showed high wear spots, but the pistols functioned. The Action Works-modified Hi Power went well over 10,000 rounds including performing as the test bed for +P+ 9mm ammunition. There were no problems, just a little loss of accuracy at the 10,000-round mark. I think shooters need to understand that springs and magazines are a renewable resource and must eventually be replaced. Guns also sometimes wear out and need to be either replaced or retired.

License-built pistols were produced in Argentina and clones and copies manufactured worldwide. The FM Argentine guns originally

copied the Hi Power, but later versions deleted the step in the slide, producing a pistol with a different profile. The probable reason for this was to diminish the amount of machine work involved. The design may be stronger this way, but it would take a truckload of ammunition to prove it. The Hungarian FEG is a quality variant, with a good finish and performance comparable to the original. One of the most interesting of the variants is the John Inglis-produced Hi Power. The story goes that Belgian engineers escaped to Canada with plans under their arms for the manufacture of the FN Hi Power.

During the war, the Hi Power was a favored pistol for commando use. After all, the standard British issue—a Webley revolver—was not the most modern combat arm. The Inglis-produced pistol was sent to our Allies, including China, and was heavily used by the British.

They liked the Hi Power, and while they used whatever was available during the war, after World War II, the Hi Power became standard issue for the British army. An extra bit of understanding is needed when studying the Inglis Hi Power and any other Hi Power. It is possible that Hi Powers with identical serial numbers exist in different places worldwide, since FN used the same blocks with different contracts. That's fine and dandy for FN, but it has serious collectors searching for identifying proofmarks. The Inglis Number 1 and Number 2, Mark \* 1, for example, differ. Marks indicate differences such as the ejector or extractor, while the numbers are even more important. The Number 1 is the Chinese pistol with tangent rear sights and a slot for a shoulder stock. The Number 2 is the conventional-sight version. Serial numbers were applied after finishing, and if the pistol was refinished, the





This holster, from [nightingaleleather.com](http://nightingaleleather.com), is a first-class addition to the Hi Power. The author sometimes carries a classic Hi Power for personal defense. It isn't plastic!



numbers no longer appear "in the white." Most are in well-used condition. They were not as well finished as the FN versions were when they were new.

I have probably fired more rounds through the Inglis Hi Power than any other type. The pistols are pleasant to fire. The John Inglis gun is among my favorite recreational shooters. It isn't possible to know who once used the pistol, but we may draw conclusions as to how they maintained the gun. One example I recently handled and fired had an adjusted dovetailed front sight, with a punch used to peen the surrounding metal. The result was a pistol that was sighted in for the owner's eyes, and the front sight isn't likely to move again. Fortunately, the setting was correct for my eyes and 124-grain Black Hills ammunition.

After considerable experience with the Hi Power, its parts interchangeability seems excellent to me. Other than the change to a different extractor style, its only variation is in different generations of sights. The original military sights are no better or worse than many of the day. The later MKII sights are much better combat sights. The tangent-style sights came in a number of variations. The late-model Browning features variations on adjustable sights, including one type that seems to fit into the military dovetail. The adjustable-sighted commercial guns are fine sporting guns

occasionally found in the used section at the shop with a sight leaf missing. These sight leaves are sometimes difficult to obtain, since magazines interchange between all of the models.

I have already stated my opinion on the longevity of the 9mm Hi Power; any handgun in use for so long will have among its number worn or broken examples. I have found that the Hi Power feeds modern JHP ammunition. When hollow points became common in the 1960s and '70s, many featured a wide-mouth hollow nose that was not designed for feed reliability. As a result, these loads did not feed in military pistols without barrel polish or throating. Throating, once universally recommended in the popular press, isn't the best course and is often improperly done. Modern loads such as the Remington Golden Saber perform well and feed reliably. As for Hi Power accuracy, I feel that it's pretty consistent. Most examples may be counted upon for a five-shot group of 2½ to 3 inches at 25 yards with good ammunition and from a solid bench-rest. In the end, the Hi Power is far more than just a handgun to be kept in a safe and never fired. On the contrary, it is among the most useful of all 9mm handguns. Light enough for constant carry, reliable, effective and with more than a little pride of ownership, this is a handgun that has stood the test of time. **IMS**

# SPURIOUS

HOW TO AVOID FALLING FOR A FAKE

■ By Dave Dolbee

**I**n the business of firearms auctions, it is simply an unavoidable fact of life that one is going to come across what is known as a spurious firearm.

For those unfamiliar with the term, "spurious" is the most gracious way of calling something phony, bogus or a fake. So how do you avoid this problem? There are a number of ways.

## WHY IT HAPPENS

In some more innocent situations, a fake or counterfeit item may be labeled and sold as such. A collector could want that Russian Contract 1911 pistol with spurious Cyrillic text, in order to get a representation of the original at only a fraction of the cost.

In fact, many replica cars are sold just the same way. You wouldn't find me turning down a replica of a 1968 AC Cobra, though I'm definitely not going to pay the same price as the original. There is a market for such pieces

given that they are priced accordingly and disclosed as such to the buying public. Much like the AC Cobra example, replicas can be extremely desirable and fun.

Sometimes collectors, or even an auction house, can make mistakes in good faith. Perhaps they are in possession of such a meticulously crafted forgery that no one can tell the difference save for some of the world's foremost experts. Is anyone to be held to blame in such an event except the forger? No, because both parties acted in good faith and intent towards what they thought to the best of their ability was a "real" object.

However, if after the fact the buyer discovered that his or her item was not 100% as claimed, it would be the duty of the seller to make it right. It is with scenarios like this in mind that premiere auction companies such as Rock Island Auction Company offer a guarantee of the headline for every single item in its Premiere Firearms Auctions. Should that item not be as advertised, the auction company will make it right via a full refund.



Outstanding Henry Nettleton  
Sub-Inspected U.S. Colt  
Single Action Cavalry Model  
Revolver with Factory Letter



# Firearms

**About the author:** Dave Dolbee is the editor of *Inside Military Surplus*.

Honesty and integrity are two qualities indispensable to an auction house, or any selling business. It's as simple as knowing that if you burn someone once, they are not going to return. If there are too many people who question its transactions, the seller's carefully built reputation will rightfully nose-dive faster than German U-boat. Businesses stand to gain much more from positive experiences and good word-of-mouth advertising than they could ever achieve by being less than completely truthful.

It is with that dedication and responsibility to fairness that experts can examine the last kind of spurious arms: out and out fakes maliciously sold as the genuine article for profit. It goes without saying that the faking of firearms hurts the collecting community. Not only is it fraudulent, but it erodes trust and could potentially lower the prices of authentic items.

Jim Supica, the current museum director of NRA Museums, once detailed several types of fraud in an

article he wrote for the Blue Book of Gun Values:

Aging and modifying a modern reproduction or replica firearm to pass it off as an original.

Altering a common model to make it appear to be a rare model.

Adding modern engraving to an older gun, and passing it as original period engraving.

Creating false historical documentation or attribution of historical usage.

Altering a firearm to a more valuable configuration — for example, rare barrel length, uncommon finish, special grips, or fancy stock, rare caliber.

“Upgrading” a low-grade gun to resemble a higher grade by the same maker.

As I mentioned before, even top auction companies are not immune to being involved with these types of guns, and the obvious recourse upon discovery is to make it right. Rock Island Auction Company has done so on numerous occasions, most notably on an episode

Continued Next Page

Factory Documented Spectacular and Extremely Rare Gustave Young Factory Engraved Smith & Wesson Model 320 “Buntline Special” Revolving Rifle with Shoulder Stock and Case



of RIAC's TV show *Ready, Aim, Sold!* when it discovered that it was dealing with a fake Winchester 1 of 1,000. The documentation that had preceded the Winchester was incredible, and worthy of its own feature article in another issue of our magazine.

You may wonder what inspires a person to write an article of this type. An ominous "buyer beware" to collectors? Perhaps some alternate point? No, more commonly it is the need to distance reputable service providers from several potentially spurious firearms previously identified—some that have been sold and are now showing up in other auction houses.

## HOW TO AVOID THE PROBLEM

As a buyer, you are making an investment. Perhaps it is a minor investment; perhaps it will instead become a major part of your portfolio and the fulfillment of a lifelong dream. Either way, you are purchasing a product and need to be able to have the confidence that you're spending your hard-earned dollars well.

Unfortunately, there is no magic bullet or surefire way for a layman to spot a spurious offering. But that does not mean it's time to stop collecting and run for the hills. It is simply a cautionary tale to remind you to always keep a few principles in mind when buying.

First, "A gun with a story and no documentation is just a gun with a story."

Second, any deal that seems too good to be true probably isn't a deal you want.

And last but certainly not least, when buying a fine collectible, the few dollars you may spend to verify that you are buying the item and quality you believe are the best investment you can make. You can't put a price on peace of mind.

So go about your business with some caution, and you can make a nice investment. **IMS**

Deluxe London Cased Set of Colt Deluxe Gustave Young Engraved Model 1855 Sidehammer Pocket Revolvers



Extraordinary Historic Early Production Henry Rifle from the Samuel Colt Collection





125

Phenomenal One-Of-A-Kind "A.F. Stoeger" Three Gun Cased set with Numerous Original Accessories Including Shoulder Stock

Extraordinary, Factory Documented Winchester Model 1873 "One of One Thousand" Rifle with Extremely Rare Half Octagon Barrel





# Battle Worthy

THE YUGO AND THE CHIANG KAI-SHEK

126

■ By Wilburne Roberts

**P**aul Mauser's rifles were used in all of the major conflicts of the last century. While there were early Mauser rifles that represented important steps in technology and which proved their worth in battle, easily the most important of his creations was the Mauser 1898, or "Model 98." This rifle was useful both as an implement of war and as a tool of commerce.

The Model 98 featured a stronger bolt than any rifle previously manufactured, and locked with three lugs. The rifle could handle increasingly powerful military cartridges such as the 8mm—the 8 x 57mm Mauser cartridge was first introduced in this rifle. The initial Model 98 was a good rifle, but Mauser eventually designed shorter versions. The new rifle, with an abbreviated barrel and a slightly shorter action, proved to be popular as well as effective.

Before World War II, Fabrique Nationale built Mauser action rifles for use worldwide. A variant of the shorter rifle was also supplied to Yugoslavia, and Yugoslavia maintained its Yugo 47 rifle well into the 1950s. Many of them were rebuilt for military use, and a later rifle known as the Yugo 48 was also eventually manufactured.

The Yugo 48 rifles used a shorter receiver and turned-down bolt that is instantly recognizable. One identifying marker of the early models is their steel magazine floor plates. Later guns will have a stamped floor plate. In concept, they bear the same relation to earlier Mauser rifles that the Springfield 1903A3 does to first-generation Springfield rifles.

The Yugo 48 was designed for less expensive manufacture, and in that respect, it realized success. Later versions further cut costs and featured stamped magazine plates, stamped barrel bands and stamped trigger guards. This

inexpensive manufacture seems to have detracted nothing from the performance, and the Yugo 48 remains a respected rifle.

When collecting bolt-action rifles, one must remember that the Mauser rifle was used worldwide and manufactured in many different nations. As an example, Yugo rifles put to close examination may actually be discovered to be reworked German 98K rifles. The original 98Ks use a different receiver and a steel magazine floor plate. After the war, immense stocks of captured German rifles were reworked and issued to the Yugoslavian forces. While the majority of German markings were removed and the Yugoslav crest applied, there are often telltale markings that identify the rifle.

The rifle illustrated here is an excellent example of this bait-and-switch type. It is hardly in mint condition, but neither is it simply a beater. This rifle was doubtless used during World War II, and then rebuilt



Typical Mauser 'ladder' sights.



by Yugoslav arsenals afterward. It is marked Preduzece 44 on the left side of the receiver. The bolt action is very smooth; the safety works properly, and the trigger action included is a typical two-stage military.

The sights and every configuration are original. This rifle is a good all-around shooter, with quite a bit of life left in it. As I often tell my students, if the Mauser rifle isn't tactical, then no rifle is. The controlled feed action of the Mauser picks the cartridge up from the magazine, with the extractor taking a good hold of the cartridge case rim and controlling feed into the chamber. When the cartridge has fired, the extractor still grips the cartridge, forcefully extracting the case from the chamber as the bolt is turned.

The claw extractor maintains control of the cartridge at all times, even if the rifle is held sideways or upside down. The Mauser controlled-feed action is far superior to the modern push-feed action used in most sporting rifles. While more expensive to produce than the modern version, it is the more battle-worthy action choice.

The author's Yugo 48 has been fired extensively with a variety of ammunition, including Greek surplus, Winchester commercial loadings and Wolf's FMJ offering. The Greek is the strongest: a true military-rated loading. The Wolf is a good resource for those who want inexpensive use: it is affordable and includes non-corrosive priming. The Winchester load uses a soft-point bullet for sporting use.

At present the Wolf Gold has proven to be the single most accurate loading, with an average three-shot group of 2.5 inches at 100 yards. This rifle may be capable of better accuracy in the intrinsic sense, but the issued sights are its most limiting factor. The Greek Surplus loading and the Winchester 180-grain JSP each exhibit three-shot groups of about 3.0 inches at 100 yards. Yugo rifles are not as common as they once were. While legitimate collectibles, they are also useful for anything that may be done with a powerful open-sighted rifle.

## THE CHIANG KAI-SHEK

Another quite interesting Mauser-type rifle recently crossed the author's path. While produced in massive numbers, this rifle is seldom encountered at gun shows. The Chinese Type 24 is often called the Chiang Kai-Shek rifle. The rifle is a variant on the Mauser rifle that is most similar to 1930s-production German Mauser rifles. It is not a carbon copy of the Karabiner 98K, but instead bears more similarity to earlier rifles. The People's Republic of China later used the rifle extensively, sometimes with the original markings obliterated.

It is interesting to note that the Chinese used a variant of the early Mauser 88 pattern rifle well into World War II. Beginning in 1935, the Chiang Kai-shek rifle entered Series production. Eventually some half-million rifles were produced. Before the Axis partnership, Germany and China enjoyed a close relationship in many matters, with the Germans often training Chinese troops. These rifles differ in quality due to the manufacture in different arsenals, but most of them were at least serviceable.

The tooling came from Germany

and the Chinese Type 24 is similar to the Gewehr 98, but also similar to the German infantry rifle versions of 1933 and 1934. The Chang Kai Shek rifle was considered to be at least as good of a rifle as the Japanese Arisaka, and the 8mm cartridge hit harder than the 7.7 Japanese cartridge. The rifle was produced in great numbers — perhaps as many as 600,000 — and saw use by the Chinese well into the 1950s.

The Red Chinese used the Chinese Type 24 during the Korean war. They were issued to second-line troops as late as the 1960s, and perhaps even later. These rifles are an important part of history, and they are often interesting to fire and use. In my experience, surplus loads of uncertain origin will give results of about 3.5 MOA with the general run of these rifles.

The Chinese rifle illustrated was modified at some point by shortening the barrel, although the bayonet lug was retained. Such rifles exist, and this example may have been modified in a military arsenal, although this is not certain. The rifle has not been fired because a preliminary check

indicated excess headspace. This brings us to another point: before a rifle is fired, it should be checked. Routine maintenance is also an important factor.

## CHECKING THE MAUSER RIFLE

When working with this type of turn-bolt rifle, you must have a good understanding of the need for preventive maintenance and lubrication. The author also realizes that there are a number of concerns with the automatic that do not come into play with manually operated rifles. Still, it is important to avoid being surprised at the level of maintenance and care required in working a bolt-action rifle.

Often, a step here and there will be an aid in the rifle's longevity. On the flip side, I occasionally discover a shooter who is his own worst enemy. One example of this is the common sticking bolt. When the bolt sticks, many shooters will work the bolt more aggressively and use all of their strength, causing even more damage. When you are addressing common bolt problems, you need to be familiar with the individual and how it operates.

Continued Next Page

Mauser rifle markings are a fascinating study.





 This is the recognizable  
Yugoslav state seal.



 The Mauser safety is still unsurpassed  
today, and the bolt is the strongest  
design yet invented.

## SAFETY CHECK

Whether you're dealing with a well-worn Turkish Mauser, a like-new Yugo 48A or a sporterized rifle, the safety check is always the starting place. Begin with a double-checked, unloaded rifle. Open the bolt, check the magazine and place the forefinger in the chamber to check for a loaded cartridge. Work the bolt to the rear to cock it. Close the bolt. With the safety to the far left, press the trigger. The striker should fire.

Next, work the bolt and move the safety to the middle or flag position. Press the trigger. The rifle should not fire. Work the bolt and move the safety to the far right. The bolt should be immovable and the rifle should not snap! when the trigger is pressed. If the rifle fires, there are different possible explanations, but the bolt or parts of the bolt may have to be scrapped.

Move the extractor collar around the bolt a few times to ascertain whether or not this important piece is free of crud and varnished oil. Firing pin inspection is critical. The details in this report are common to the Mauser 98, 98 K and the Yugo 48A. Some have reported expedients such as peening or even home made parts. If the firing pin is rusty or pitted it should be replaced. Pierced primers are a fault common to Mauser rifles and surplus ammunition; they leave a smoke ring

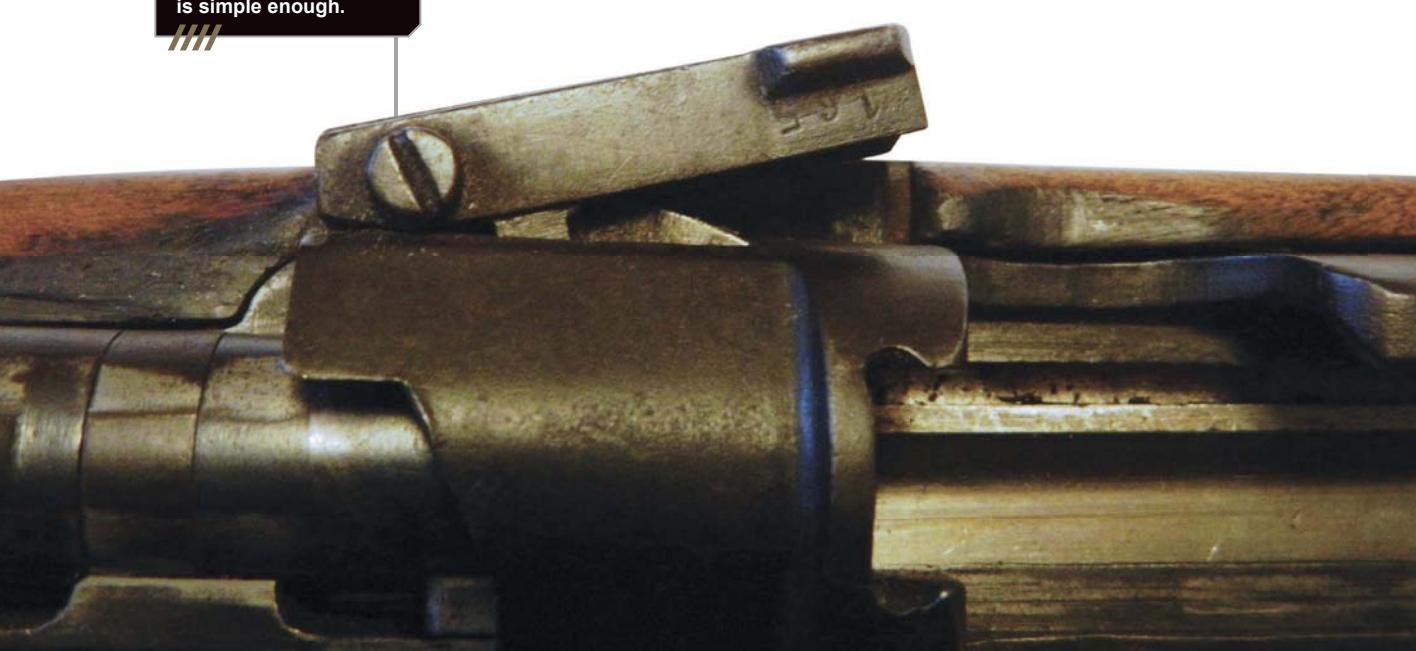
around the bolt face, so be aware of this fault during preliminary inspection. The firing pin tip is never sharp as issued, but should instead be smooth and radiused.

The Mauser's firing pin shoulder is an excellent safety feature. This shoulder is about 1.5 inches behind the firing pin tip, and does not allow the firing pin to move forward until the bolt is nearly closed. When at rest, the firing pin should be seen about a 1/10-inch in the firing pin tunnel. The firing pin should not clear the bolt face without 90 degrees of rotation. This is easy to check.

Move the firing pin into the bolt and rotate the firing pin to check for proper operation. The firing pin will move through the bolt body past the internal stops until it comes to rest. Then check for fit—the pin should not protrude from the bolt. You may also wish to check cocking piece and firing pin fit. The cocking piece should rotate smoothly on the firing pin. If it does not, lubricant may help fix it.

It really is that simple. Take care of your Mauser and your Mauser will take care of you. Many of today's most popular rifles feature bolts or operating systems that are based on the Mauser design, and others are a direct copy. This means that you could possibly have a little Mauser inspiration in the safe already ... but nothing beats the real thing. **IMS**

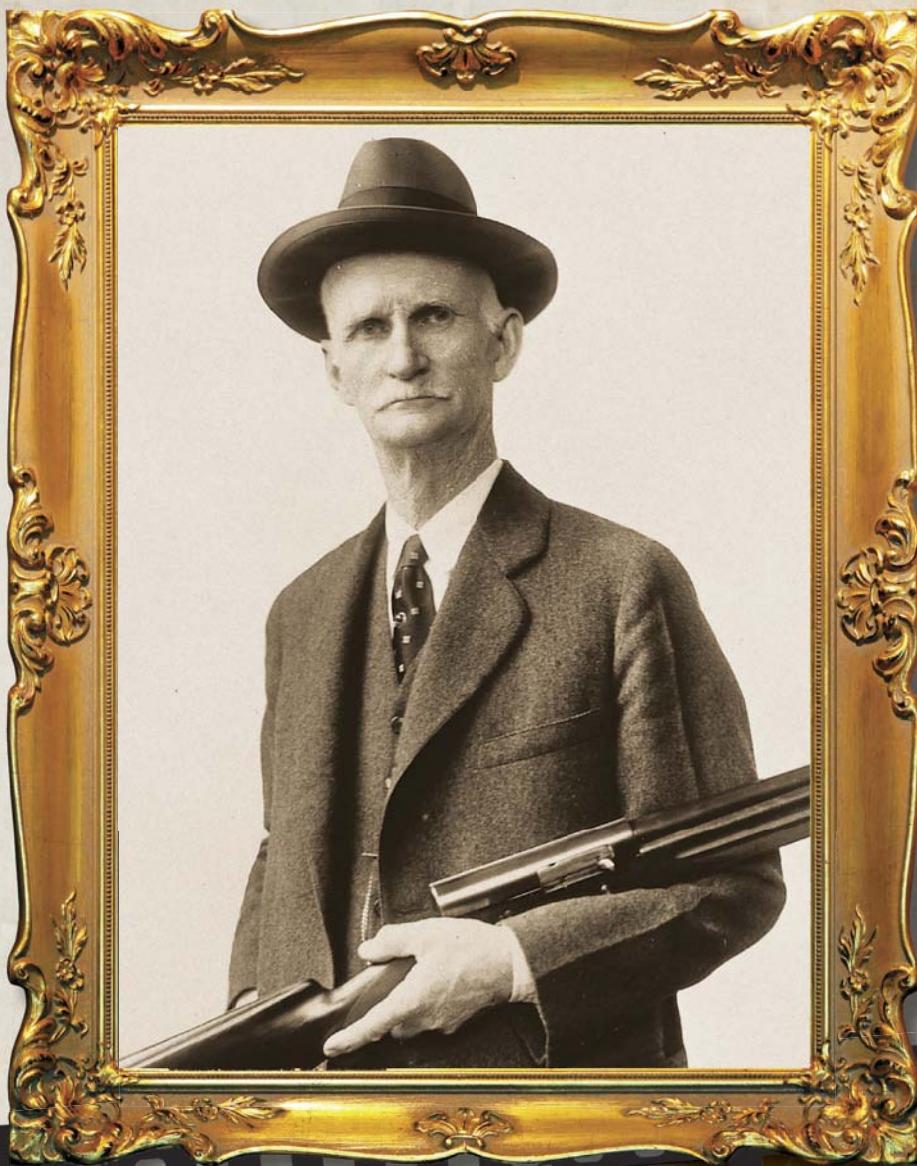
Made world famous by the 1898 Mauser, the claw extractor rides on the right side of the bolt and runs the full length of the bolt body. The extractor does not rotate, instead, the bolt rotates and the extractor remains attached via a collar.



THE  
**20<sup>TH</sup>** CENTURY'S  
MOST INFLUENTIAL GUN DESIGNER

lastlook

## JOHN MOSES BROWNING



INSIDE MILITARY SURPLUS

131

14a





# Sanctions: No More Russian Rifles!

For Now this Original Piece of History Can Be Still Yours.



Due to the Russia-Ukraine conflict, the Few in our Warehouses are The Last from Russia! Prices will rise Without Notice!



Snipers at Stalingrad in 1942: Vassili Zaitsev at the left, standing next to Galifan Abzalov, who introduced him to sniping (pp 72, 83 in Zaitsev's book). Sniper teams decimated the German officer corps at Stalingrad!

**FREE:** with your rifle you get "Notes of a Sniper", Vassili Zaitsev's first-hand book about dueling snipers at Stalingrad.

Also **FREE**, you will see this Mosin sniper rifle in action in the "Enemy at the Gates" DVD. **Plus** you get the original Soviet sling, ammo pouch, cleaning handle and rod guide, oil can, firing pin protrusion tool, and Display Stand.



This Mosin M91-30 PU Sniper Rifle was Manufactured during WWII together with its Original Matching WWII Scope.

In this premium example the scope's Serial Number, 32084, is marked on the scope body; and the scope's Serial Number is also marked on the rifle's barrel shank, which tied this scope to this rifle at the factory in 1943.



Manufactured to tighter-than-normal tolerances, the M91-30 was the most successful sniper rifle ever deployed!

**Warning! Call to Secure Yours, Now!**

**Mosin Collector Sniper Rifle \$799**  
Special Features and Other Grades also Available

## Best Mausers! Best Quality, Best Price. The Last\* Military-New Mausers.

Dollar for Dollar, the Best Mauser Available Today! Ideal for Shooting or Collecting.



### This Mauser 98 Karbine

was made in Serbia on an FN production line before WWII. Captured new by the Blitzkrieg in 1941. Never issued. Re-standardized at the factory in 1947. Displaced by automatic rifles, it remained preserved and unissued, until now.

**Beautiful Finish and Bright, Sharp Barrels!**

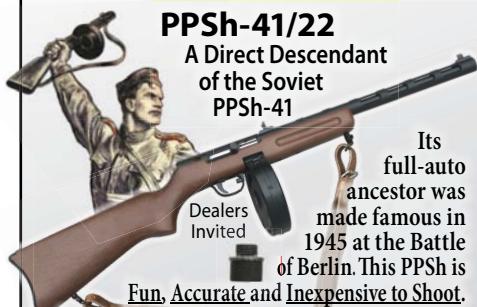
**M2447 Mauser 98 Karbine \$399**

with your rifle, while supplies last, **Free!**

### Popular, Brand New Production Rifles

#### PPSh-41/22

A Direct Descendant of the Soviet PPSH-41



Dealers Invited

Its full-auto ancestor was made famous in 1945 at the Battle of Berlin. This PPSH is

Fun, Accurate and Inexpensive to Shoot. (You can also buy its 50-rd drum, if it's legal where you live.)

**Free:** Original Soviet Oil Can and Soviet Leather and Web Sling with Swivels. New PPSH-41/22 .22LR semi-auto rifle \$495.

**Black Lightning** – here's a next generation version of the Famous M16.



Semi-auto in .22 Magnum.

The Black Lightning has a full-length Picatinny rail to accept M16-style sights or a variety of scopes and even a bi-pod. Powerful, affordable and very accurate!

**Rifle with scope rings Only \$595.**

\* For years now, No more good Mausers have been found. These are the Last Originals!

### Satisfaction Guaranteed!

We have passed muster with every major firearms publisher, like Rifleman, Guns & Ammo, Guns Magazine, etc; with the Better Business Bureau; with the ATF; and with the toughest judges of all . . . Tens of Thousands of Happy Customers.

I love it. It shoots like a dream and is highly accurate. I would recommend that everyone buy one.

- Dan in Pittsburgh, PA

Just a short note to tell you how impressed I am with the quality of the rifle I received. It is one of the best C&R group rifles in my collection.

- Dwight in McKinney, TX

Received the Mauser today. It's beautiful. Thanks for all your help. Pleasure doing business with you . . .

- Warren in Metairie, LA

You can Purchase with Confidence!

**Call Us Before They're All Gone!**

**800-274-4124**

**Mitchell's Mausers**

Mitchell Manufacturing, P.O. Box 9295, Fountain Valley, CA 92728  
714.596.1013 fax 714.848.7208 www.Mauser.net